STORAGE

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DETROIT MEDICAL JOURNAL

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The Practitioner's Monthly

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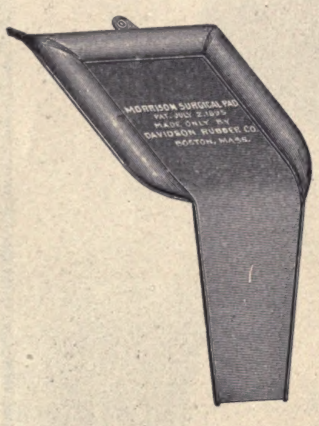

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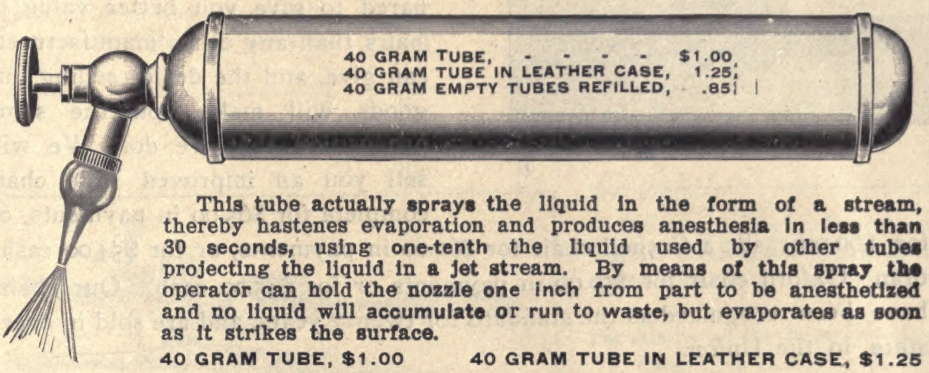

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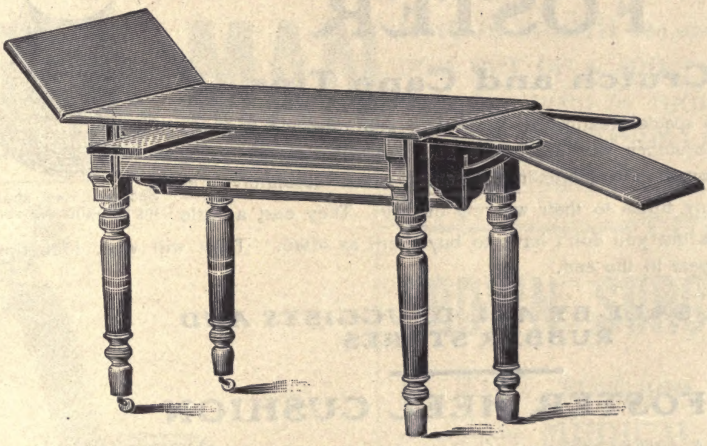

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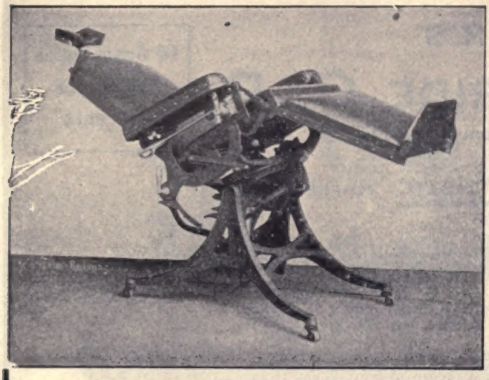

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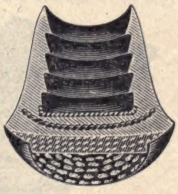

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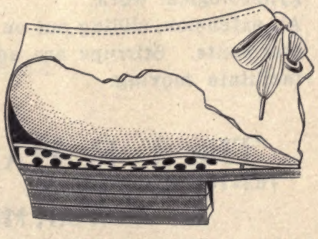

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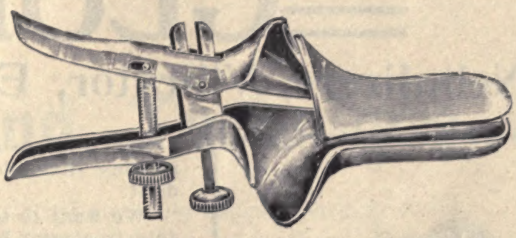

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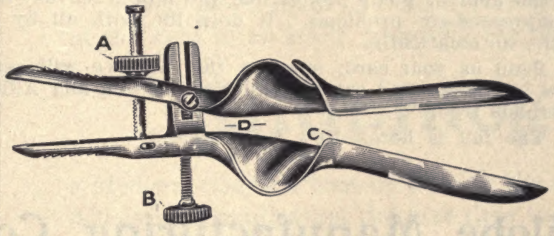

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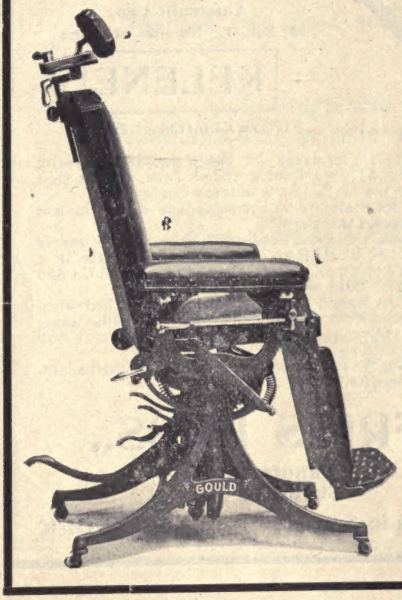

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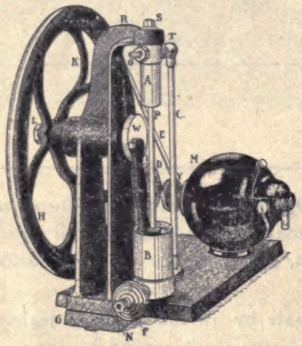

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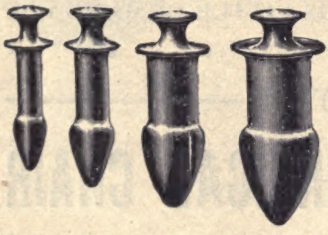

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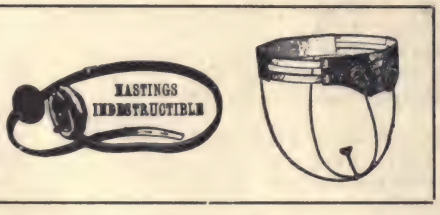

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THE DETROIT MEDICAL JOURNAL.

VOL. V. NOVEMBER, 1905. No. 8.

NOTES ON EXPERIENCES DURING THE RUSSO-JAPANESE NAVAL WAR, 1904-1505.*

By S. SUZUKI, M. D.
Surgeon-General, Imperial Japanese Navy.
Tokio.

(Owing to the length of this article, the more technical parts have been omitted, the sub-title in each case being stated so that one may know exactly what omissions have been made. This paper is published by the special permission of the Secretary of the Association of Military Surgeons, Major Pilcher, by whose courtesy, also, we are able to present the illustrations for this article.—Editor.)

I feel it a great honor to be allowed to address this honorable meeting on the subject of my recent experiences during the present war. The limited space of time at my disposal does not allow me to go into details even on points of importance; and I think, therefore, that my best plan will be to touch briefly on the several points which have been most prominent in my experience, so as to give you at least an outline of the whole subject.

I divide my experiences as Surgeon-in-Chief of the Combined Fleets serving on board the Flagship "Mikasa" under Admiral Togo, into two parts.

(I). The Treatment and Management of the Wounded.

(II). The Sanitary Arrangements of the Combined Fleets.

And first, as to the

Treatment and Management of the Wounded.

In February of last year, before our fleets left Sasebo, I issued orders to the Surgeons of the fleets that aseptic treatment shall be adopted in the treatment of the wounded in all the battles of the war then imminent, and that all necessary preparations for the adoption of this treatment should be made. I also ordered the observation of conservative methods of surgery: amputations, etc., on board the warships should be avoided as far as possible, and every preparation made for transferring the wounded as soon as possible after the conclusion of an engagement to the hospital-ships, for conveyance to the home hospitals, where complete asepsis could be enforced and better results obtained than on the warships where our arrangements were of necessity more or less incomplete.

All the gentlemen here present are aware that even in peace time complete asepsis is a matter difficult of attainment on board a warship. During an engagement it is ten times more difficult. The firing of guns, the hasting to and fro of men engaged in combat, and a thousand other things fill the air around the temporary surgery with dust and particles of matter, a number of wounded cases are brought in, all demanding immediate treatment, and the constant need for despatch in doing our

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work—all combine to make complete asepsis a thing almost impossible to enforce. We are, however, convinced believers in the immense value of the aseptic treatment of recent wounds, so that we have constantly endeavored to combat all the difficulties that stood in our way, and as I hope to show in this paper, our perseverance has been abundantly rewarded.

The total number of casualties from February, 1904, to August, 1905, was 3,682; of these 1,891 were killed, and 1,791 wounded, of which 117 died afterward.

Of the 1,891 deaths, 1,445 were due to shipwrecks caused by submarine mines, and only 563 to wounds received in actual fighting.

Of the 1,791 wounded, 647 received wounds requiring hospital-treatment, and of these only 32 died. The rest were partly light cases, and partly cases requiring greater care.

Our aseptic methods have been the same as those in general use in every part of the world. All dressing materials were sterilized by steam, and kept in close tin cases: surgical instruments were purified by boiling in soda water: the surgeon's hands, and the skin around the wounded parts, were washed in sterilized water, with soap applied by a brush. A solution of sublimate was next used, and this washing was followed by another washing with sterilized water. When the condition did not allow the use of soap and water, un-hydrated alcohol was used to sterilize the skin around the wounds.

Many opinions have been broached by the surgeons of various navies as to the proper treatment of the wounded during the action. My own experience during the actions of present war leads me to the conclusion that it must be divided into two stages.

In the first stage, i. e., whilst the action is still going on, we can hope to accomplish nothing except the most urgent aid. We can merely ligature or compress arterial bleeding, or apply ready-made splints in cases of fracture, or cleanse the wounds of the soft parts of the body, and apply sterilized gauzes and bandages; but that is all. It is not till we come to the second stage, when the action is over and the firing has ceased, that we can really begin to apply our healing art. We can then get the ship's surgery ready for the work, and give orders for the wounded to be brought thither from the places where they have been temporarily bestowed. We take the severer cases first, examine the wounds minutely and make notes on each case, try to extract any fragments of shell or pieces of cloth which seem as if they could be got without much difficulty, and where possible suture the skin. It will perhaps be thought that in these latter cases, primary union is hopeless, and that not much good can be obtained by suture. Our experience has, however, showed us that to cover a wound surface with skin is a great protection to it. In cases of compound fracture, free segments of bone in the wound cavity were extracted; but fissured fragments or such as were not completely detached were left **in situ**, and it was found that these would unite afterward at the home hospitals. The dressings in the second stage were the same as those used in the first.

The treatment given during the second stage was merely of the nature of urgent aid. I believe that it is better to give temporary relief to the wounded rather than to meddle with complicated operations, and to transfer the patients as soon as possible to the hospital-ship. The action which has ceased for the time may at any moment be resumed. It is not right, therefore, nor desirable, to spend precious time in attending to the wants of a few, and thus to leave unattended the larger portion of the wounded. I believe that in crises like these it is a surgeon's duty to give relief to all the wounded, and not to a few only.

The Location of the Temporary Surgery.

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Receiving Place for the Wounded After First Aid.

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Carrying the Wounded.

It is the practice of the Japanese Navy during time of peace to divide the ship's complement into two portions for instruction in first aid and ambulance work.

The first division comprises clerks, riggers, servants, and fire brigade men (also the bandsmen on board the flagship), and receives instructions from the ship's surgeons, in bandaging wounds, prevention and stoppage of bleeding, and carrying of wounded men, for several hours per week. These men, therefore, are well qualified assistants in the work of tending the wounded with first aid. The second division consists of the rest of the crew, and receives instruction as time and opportunity allow.

We found, however, that in the bustle and excitement of an action it was impossible to put into practice all the rules and devices which our men had learned. In about one-third of the cases, first aid dressing was applied to the wounds, and the men carried down on stretchers to the surgery: in the remaining cases the men were just picked up as they fell and carried straight to the surgery in the arms of their comrades. In cases of slight injuries, however, the dressing was at once applied and the men went back to their stations without coming to the surgery at all.

It might perhaps be inferred from what I have just said that our ambulance work was not satisfactory. But this was not the case. It is not to be expected that work of this nature should be carried out always "according to the book" in the thick of a close fight, where unforseen accidents are continually happening to upset one's preconceived calculations. Let me instance a case. On the Flagship "Mikasa" we had ambulance parties with first-aid dressings stationed in several places on the upper and main decks, the intention being that whenever a man fell he should at once have his wounds dressed and be taken on a stretcher to the surgery. The "Mikasa," however, as being Admiral Togo's Flagship, was constantly in the very thick of the fight. In the battle of the Yellow Sea she was a target for many Russian guns, and seven ambulance men were killed and seven more wounded whilst engaged in the

work of giving first aid dressing on the upper deck. After that experience it was considered unwise to risk any long exposure on the upper deck, and from that time the wounded were carried down to the surgery at once, without waiting to have their wounds dressed on the spot.

It was but natural that we should have some anxiety as to the after course of wounds brought exposed to the surgery, but I am glad to say that all such cases did well after admission to hospital. The wounded were often carried by two men, one at the head and one at the feet; but oftener still a single man would take his wounded comrade on his back. We Japanese are accustomed to this mode of conveyance, our babies are always carried about on the backs of their mothers, nurses and elder brothers and sisters.

Our experience has been that no one kind of stretcher is adapted for all the requirements of naval service, but this is a point on which I should like to invite your discussion later on. We had stretchers distributed in various places on the upper and main decks of our warships during action; but in many cases the stretchers were injured by fragments of shells, or buried beneath broken spars, etc., so as not to be readily accessible, or else the passages got so blocked with debris as to be impassable. We were thus frequently obliged to have recourse to carriage by hand.

Dressing Materials and Instruments.

A large consumption of dressing material is unavoidable during action. We foresaw this and provided each ship with a stock of material considerably larger than our usual annual ratio. Thanks to this precaution, none of our ships suffered from a deficiency of dressings, not even after the battle of the Japan Sea, when we had to treat many Russian wounded in addition to our own. For instance, 120 Russian prisoners were treated on board the "Kasuga" after the battle, and even with this large additional demand there was no shortage of supply.

Packets of first-aid dressing for the use of the Navy necessarily differ very much from those served to the Army. Gunshot or splinter wounds are usually much larger than those made by a small bore rifle bullet. To cover a gunshot wound completely we require two or three ordinary-sized packets of dressing, and it generally happens that when a man is struck by a bursting shell he has more than one wound. My experience after the fighting on the 9th of February, last year, showed me that much valuable time was lost in the mere opening of the small packages hitherto in use, and I consequently wrote at once to the headquarters to have the size altered. The packages hitherto served out to our Navy contained each three pieces of sublimate gauze folded to the size of three inches in length, and from 1½ to 2½ inches in width. This was inclosed within a folded piece of triangular bandage and the whole tightly packed in a small linen bag. There was no time in emergencies for the ambulance men to open and properly unfold these little packages, so as to cover the whole surface of the wound, and the consequence was that very often only a part of the wound was covered.

The new package contains four pieces of sublimate gauze, 24 inches

long, and folded in a package 4 inches square. This package is wrapped in Japanese paper and is placed in a loose bag of "shibukami," a stout Japanese paper fibric steeped in the juice of the bitter persimmon, which also contains a regularly folded triangular bandage, and is tightly closed with sterilized paste. Our reports tell us that the new package is much easier to open, and that the larger size of the pieces of gauze materially facilitates the work of dressing. Packages of first aid dressing should be carried by all ambulance men besides being distributed in suitable places in the batteries, on the bridges, and elsewhere.

Each surgery should have a pair of large tailor's shears, these being very useful for cutting off the clothes of wounded men. Also a large number of dressed splints of different kinds and ready for use should be provided.

Fenestrated zinc plate splints are sometimes very useful. With them should be provided a pair of stout nippers for cutting them to the shape required. The aid of the blacksmith cannot be invoked for this purpose during the heat of an engagement.

Cotton rollers, 6 or 7 inches wide, are sometimes useful, and ought to be provided in every surgery. Also, for every surgeon and attendant there should be provided two or three changes of operating clothes, as the clothes worn during the action cannot be worn again for the operations during the second stage of treatment. India-rubber tubes, 4 or 5 feet long, carried by an ambulance party will sometimes save life by stopping bleeding from the limbs. We have had few instances of this during the present war. A transfusion-apparatus of salt solution will sometimes save from imminent death. We had one case of this on board the "Izumo."

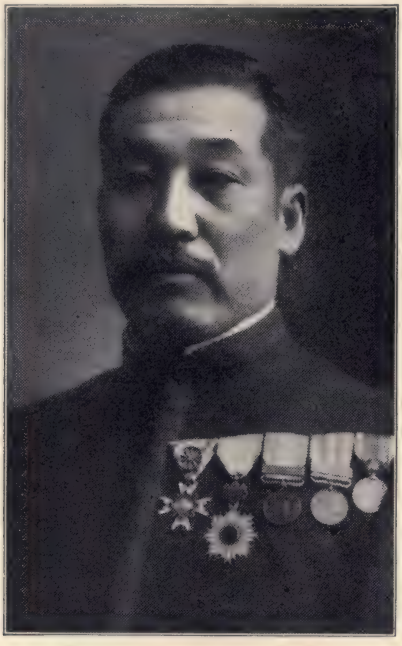
Note should also be taken of the identification label. Every member of our force carries on his body a small wooden label, marked with his name and rank. This is of the greatest value to the surgeon in the identification of the dead. Bluejackets not unfrequently borrow clothes from their comrades, so that the marking of the clothes is no infallible guide, and it sometimes happens that the faces of the dead have been so disfigured as to be unrecognizable.

Protection of Persons.

It stands to reason that in preparing a ship for action everything should be removed except what is absolutely indispensable or useful for protection. Hammocks are very useful for protective purposes, but all metallic objects should be taken away wherever practicable. For instance, during the battle of the Yellow Sea, a semaphore in the fore part of the "Mikasa" was struck by a shell and 23 persons were either killed or wounded by splinters and fragments. If the semaphore had been removed—and it was not essentially necessary—this deplorable loss would not have been sustained. Bridges are always favorite targets for the enemy's gunners: they should be protected as much as possible by layers of hammocks hung over the sides. The compass-box on the topmost bridge is of vital importance and cannot be removed; it also should be incased in hammocks or mantles. We have had many illustrations of

the protective value of hammock screens: for we have frequently found embedded in them fragments of shell and splinters which would have wrought much havoc if it had not been for the screens. It might be thought that hammocks would be liable to be set on fire easily; but we have not had a single instance of this in the present war.

It should be noted that gun-crews, etc., on the non-firing side of the ship ought to be placed for rest on the firing side. This will perhaps seem strange, but a moment's consideration will show that the action of the fragments of a bursting shell is radiative, and that the area of



S. SUZUKI
Surgeon-General Imperial Japanese Navy
Chief Surgeon of Admiral Togo's Fleet during the Russo-Japanese War

destruction is far larger at a little distance from the place of explosion.

We found that hammocks could be used not only as protective screens but also as life-preservers. More than one occasion, when our ships sank after contact with Russian mines, the lives of our men were saved by clinging to their hammocks. A hammock makes an excellent life-buoy—it is not hard to touch, like wooden gear, and is easily handled.

When boats are sent out for rescue work in cold weather it is advisable to take a number of blankets for the use of the rescued persons. If this precaution is not taken there is the danger that some of the men may die from cold before reaching the ship. When there are many men to be picked up it sometimes takes a long time, especially in the dark, before the boat can get back to the ship.

In order to prevent burns or scalds from exploding powder or the

steam from bursting pipes, every part of the body should be kept covered. We had many such accidents, but we found that in every case the men who observed this simple rule escaped with nothing more than injuries to face and hands. I gave orders that before the commencement of an action every one on board should put on clean underclothing. I attribute much of the rapid progress to recovery made by our wounded to this precaution.

Lacerated Wound of Foot received at Battle of Yellow Sea
by a seaman of the Nisshin

When steam is ejected from a bursting pipe, the men standing by should lie flat down on the platform or deck. Men who have tried to escape by climbing ladders or ropes have invariably been severely scalded.

It was once supposed that the conning-tower was the safest place on board a ship, but we can no longer believe that it is so. The observation-slits, though low, have to be made very wide, in order to secure a sufficient range of vision, and there have been several instances of shell-fragments finding their way into the towers through these slits, and inflicting severe injury on the inmates. One of the bridges, or even the compass-bridge, would seem to be a safer place for observation. Admiral Togo constantly used the compass-bridge of the "Mikasa" during action,

both for observation and for directing the operations, and never received even the slightest wound.

We know that there are many instances in which a life has been saved by some object which the wounded man carried about his person, and which stopped the further progress of the bullet or shell fragment, and we have had several such instances in the present war. But we have also had instances of the opposite, where objects carried on the person have been driven into the body by the splinter and have thus aggravated the injury considerably. We had one instance of a captive Russian officer who carried in his breech pocket a number of gold coins which had all afterward to be extracted from his buttock.

We have received from our surgeons many reports as to rupture of tympanic membranes and concussion of the labyrinth during firing, and I am sorry to say that I do not yet know what is the best way to prevent these injuries, though I gave the matter my most careful attention. A remedy or preventive appliance which is to be used by several thousand men must not be of a complicated nature, and I could not think of anything more effective than plugging the meatus with cotton wool. During the period of preparation the surgeons and officers instructed the men of each division as to how to plug their ears, and sterilized cotton wool was distributed for the purpose not only to the gunners but to the whole crews, and yet both after the battle of the Yellow Sea and after that of the Japan Sea, we had several cases of deafness brought to our surgeons. These cases may sometimes have been due to careless plugging of the ears, but there were some cases where the ears had been very carefully plugged, and yet deafness ensued. This will require further investigation.

The eyesight of gunners has a great influence on the results of a battle, in which accurate shooting is of such paramount importance. We have always carefully examined the eyes of our gunners before action. If we have found any eye-trouble we have treated it at once: if we have found that it was not easily curable we have had the man transferred to some other station, and his place has been taken by some man with unimpaired eyesight. We found that the gases and dust, which always accompany the firing of big guns, irritate the eyes of our gunners and impair their vision. Every battery has therefore been freely supplied with a 1 per cent. solution of boracic acid for the use of the men.

Character of the Gunshot Wounds.

Wounds inflicted by shell fragments or splinters due to shell-explosions present the characteristics of laceration, whether in the soft tissues or in bony substances. The inlets of the fragments are generally smaller in size than the exits: sometimes, however, the exact opposite is the case, though it is hard for us to explain the causes of these and other phenomena. We have often found in the cavities of blind wounds with comparatively small inlets fragments of shell several times larger than the inlets themselves. In other cases we found wounds with only one orifice, in which we could find no fragments of shells or splinters lodg-

ing, though we searched for them carefully with Roentgen rays. And sometimes (as in post-mortem examination) we found fragments the presence of which in the body we could not account for at all.

In the mutilated wounds of the limbs the blood vessels had often been cut right across, and yet there were but few cases of profuse hemorrhage owing to the curling up and closing of the divided ends of the vessels.

In perforated and blind wounds fragments often pass quite close to the blood vessels without injuring them in any way. Arterial bleeding is therefore of comparatively rare occurrence in gunshot wounds, even though the wounds themselves may be large and in several parts of the body. When the shell fragments strike bones, the bones are generally fractured to pieces, but it sometimes happens that only the superficial

Case of Compound Fracture of the Right Leg received at the Third Blockade of Port Arthur by a Petty Officer of the Fugi

layer is sliced off, or the bone merely fissured. Shell-fragments may be considered as aseptic, hence a wound caused by a small shell-fragment generally heals by primary union. Of this we had several instances in the present war. We found, however, that if a piece of cloth entered the wound along with the fragment of shell, there was always danger of the cloth being left behind when the shell-fragment was extracted, in which case suppuration was sure to follow. Whenever, therefore, the healing process is retarded by suppuration, a careful search should at once be made for the presence of foreign bodies such as pieces of cloth in the wound cavity. Once these are removed the wounds heal very quickly. The number of wounds inflicted on one person differs greatly; often they are more than one, sometimes they amount to several dozen or even over one hundred. The sizes of the wounds also differs greatly

from mutilation of whole body to wounds as small as a millet seed. It is obvious, therefore, that in the naval battles the number of the wounds greatly exceeds that of the wounded persons.

There is no definite classification of gunshot wounds but we find the following list shows the character of the wounds fairly well.

Table of number of wounds classified (from the beginning of war to the battle of the Japan Sea):

Contusion	480
Abrasion	212
Incised and punctured wounds	26
Wounds with loss of soft tissues	53
Lacerated wounds	691
Blind wounds	224
Perforated wounds	113
Pulverized wounds	43
Mutilated wounds	129
Burns and scalds	129
Concussion of labyrinth; rupture and congestion of tympanic membranes	116
Compound fractures, simple fractures and dislocations	237
Explosive wounds	570
Asphyxia	25
Drowned	716
Total	3,764

(This table exceeds the actual number of killed and wounded persons, as one person often received several wounds.)

Location of the wounds in the killed and wounded:

Wounds of the head, face and neck	808
Wounds of the chest	157
Wounds of the abdomen	58
Wounds of the upper limbs	625
Wounds of the lower limbs	728
Wounds of the back, loin and buttock	189
Pulverization of whole body; burns and scalds of whole body	527
Asphyxia	25
Drowned	716
Total	3,833

(The number of wounds exceeds the number of killed and wounded as one person often received several wounds.)

Referring to the above table we see that contusions and lacerated wounds came highest: this may be a specific character of gunshot wounds. The great number of explosive wounds was due to wounds inflicted at the time of sinking of the "Hatsuse" and the "Takasago."

Wounds of the Important Parts.

To illustrate some of the more interesting wounds of important parts the following short descriptions are appended:

1. T. K., boy of the "Tokiwa."—In the battle of Urusan on August 14th, 1904, a semilunar lacerated wound of 3.5 c.m. was inflicted on the antero-inferior angle of the left parietal bone. On admission to Sasebo hospital on the 15th he was apathetic, but there was no motor or sensory disturbance; on the 18th sudden attack of nausea and fainting followed by general convulsions appeared.

   The wound was at once cut open, and the bone being fissured 3 c.m. and slightly depressed, the part was trephined and a blood clot of 3 or 4 c.m. in width and a half c.m. in thickness was found. On removing it blood oozed from the diploic vein; this was stopped by plugging; after the operation two or three slight convulsive attacks occurred but after that he made a good recovery and was discharged October 17th.

2. J. W., signal man of the "Fuso."—He was wounded on the signal station of Namakoyama on November 30th, 1904. A lacerated wound on the left parieto-occipital suture and a hole of the size of a pea in the bone was present from which cerebral substance was escaping.

   On December 2d he was admitted to the hospital ship "Kobemaru." At the time his mental power was confused but his speech clear and he complained of headache and shooting pain; there was no disturbance of sensation or motion, the hearing was clear but almost complete right hemiopia of both eyes was present. In the hospital ship depressed pieces of the bone were extracted and beneath the dura mater pieces of bone and blood clots were found which damaged the brain substance. On December 28th he was transferred to Sasebo Naval hospital. At his admission the wound on the head was nearly healed but the hemiopia was persistent, also headache and lightning pain toward occipito-temporal region was complained of. In the hospital eyesight recovered more or less but the course was tedious. He was transferred to Yokosuka Naval hospital on May 15th, 1905.

3. T. S., seaman of the "Nakhimoff."—He was wounded on May 27th, 1905, in the battle of the Japan Sea and captured. In front and above the left parietal protuberance and to one c.m. left of the sagittal suture a wound of 1.5 c.m. long was present which passed through the bone and reached to the brain. Reaction of the pupils was sluggish, the right lower limb was slightly movable but its action was greatly impeded, the action of the right upper limb was also lessened, urine was involuntarily discharged, knee jerks were lessened. The wound was cut open on the 29th soon after admission to Sasebo Naval hospital, where an inlet of about 1 c.m. in the bone was found and an irregularly rounded disc of bone was extracted. No shell fragment was found in the wound. After the operation the

action of the right limbs returned gradually and on July 17th he was discharged completely cured.

4. R. Y., stoker of the "Mikasa."—Received the following wounds in the battle of the Yellow Sea on August 10th, 1904: Lacerated wound of the face with fracture of lower jaw; lacerated wound of the left eye; blind wound of the left thigh.

The lower lip was torn off, and the upper and lower incisors were lost, there were fractures in both rami of the lower jaw, besides destruction of the left eye and numerous small explosive wounds were present in the chest and upper and lower limbs. He was operated upon in the following way:

(1) The soft parts were separated from the body of the lower jaw and the fractured pieces were sutured with silver wire.

(2) A skin flap was cut up from the right cheek and right wing of the nose and brought down to form a lower lip.

(3) Adhesion of the upper lip to the left corner of mouth was separated and a semilunar incision was made in the left cheek, the right corner being cut open wide so as to obviate disfigurement of the lips. By means of the above operations and the application of false teeth the patient's powers of mastication and articulation were much assisted.

5. H. S.., senior sub-lieutenant.—He was wounded on March 27th, 1904, on the "Mikawamaru" when second blockade of Port Arthur was being attempted. A large perforated wound on the left supra-clavicular region, probably inflicted by the shell of a small-bore gun, was present, its inlet was nearly round, measuring 9.5 c.m. vertically and 7 c.m. transversely; the exit was oblong and smaller in size than the inlet, the two orifices being only separated by a flap of skin. A large wound cavity was formed and both the superficial and deep muscles on the left side of neck were destroyed; also, the apex of the left lung and the brachial plexus were more or less injured. He suffered from spitting of blood and emphysema around the wound though the progress of the wound was very good; but during the whole course he suffered constantly from hyperæthesia, neuralgic pain, loss of power, and eruptions like herpes of the left upper limb. He left Sasebo hospital relieved on June 26th, 1904.

6. N. F., bugler of "Irtuish."—He was wounded on May 27th, 1905, in the battle of the Japan Sea—having a penetrating wound of the size of a 20-sen piece on the right side of sixth dorsal vetebral spine, and passing deep into the spinal column. He had also a blind wound of the size of a pigeon's egg on the right shoulder. He suffered from hemiplegia and retention of urine, and died on June 9th of gradual exhaustion; at the post-mortem a fragment was found in the spinal cord by perforating through the right side of the base of the spine of the seventh dorsal vertebra; the cord above the injury was normal whilst the part below it had altered to a mud-like substance.

7. K. T., seaman of the "Iwate."—He was wounded on February 9th, 1904, in the battle off Port Arthur. A penetrating wound of the

right axillary region and a perforating wound of the right arm were inflicted. At first fracture of rib and penetration of the thorax were suspected, but after the injuries spitting of blood, shortness of breath and dullness below the third intercostal space on the right side combined with moist rales on auscultation confirmed us in our suspicions. On February 27th the wound below the armpit was opened wide and a fracture of sixth rib found; after removing the fractured ends a foreign body was searched for, but nothing was felt. Subsequently several examinations with Roentgen rays revealed the presence of a fragment in the part corresponding to the inferior angle of the right scapula, after the resection of the eighth rib an iron fragment 1.7 c.m. dimension was extracted. After the operation the wound soon closed, but his chest was affected by burns from the Roentgen rays.

Second, as to the

Sanitary Arrangements During the War.

There is nothing special about the sanitation of a warship, either in peace or in war time; but it is to be observed that men-of-war during peace-time for the most part are stationed in naval and other ports, where provisioning is easy and abundant and the crews can get their regular turns at shore-leave. In war-time, the ships are mostly cruising away from land; fresh provisions and supplies are obtained with less regularity, and the shore leave of the men is entirely stopped. Coaling at sea or at the base stations gives a constant succession of hard work to officers and men alike, and engineer-sections are never at rest, not even when the ship is at anchor. Steam must always be kept up in readiness for any sudden emergency, the watches are more than doubled, the labours of the crews are many times multiplied, and the hours of sleep and rest are reduced to the physiologically necessary minimum.

It is comparatively easy during war-time to prevent the introduction of infectious or venereal diseases; on the other hand, infectious diseases, if once they break out, are serious obstacles to the fighting efficiency of the crew. Our surgeons have throughout the war exercised great vigilance, and, with the exception of an outbreak of dysentery, which put in a transient appearance before Port Arthur, we have been singularly free from all infectious maladies.

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Rations.

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Scale of Diet for the Crew.

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Supply of Provisions.

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Water Supply.

Ships which possessed evaporators used distilled water for all purposes, and the supply was in all cases sufficient. Destroyers, torpedo-boats, and special service vessels are, as a rule, supplied from water-supply ships. There are two water-supply ships fitted with distilling apparatus which can distil about 300 tons of water each per diem, and two water-transports of 5,000 tons together, besides colliers and transports which served as auxiliary water-carriers. The ships were thus kept well supplied with water not merely for drinking, cooking, but also for washing and bathing, for both of which liberal provision was made, frequent fresh-water baths being very good as preventives of boils, etc. Salt water baths were always provided for the crews after coaling, together with an allowance of fresh water for use after the bath.

Clothing.

For use in cold weather, the following additional articles of clothing were provided:

Officers and warrant officers—1 woolen muffler, 1 pair of thick woolen gloves, 1 woolen undervest, 1 extra overcoat.

For the men—2 pairs each of thick woolen gloves, long woolen stockings, and thick-soled Japanese socks, 1 woolen undervest, 2 pairs of flannel underdrawers, 1 pair boots, 1 extra overcoat, 1 pair of straw boots. The crews of torpedo-boats and destroyers had further five extra blankets per man. For use in hot weather, large brimmed straw hats were specially provided.

As a result of our precautions we note that frost-bites were almost unknown during the cold season throughout the fleet, and that at any rate no case of frost-bite was admitted to hospital. None of the men that wore straw hats when working on deck during the hot weather suffered from sun-stroke, nor were any of the men in the engine room affected by heat-stroke in spite of the high temperature of that part of the ship. Our stokers were instructed to drink as little as possible. Their usual beverage was cool distilled water, but sometimes, as a treat, they were allowed water mixed with arrow-root and sugar.

Recreation.

Life on board a man-of-war during a long expedition is always monotonous, and the men have no opportunity of going ashore. Our men have indeed been full of patriotism and have borne without a murmur all the hardships of their service; nevertheless we have felt that recreation in some form or other was necessary to their well-being.

Whenever opportunity has allowed the men have been encouraged to sing military songs, and to practice "Kenjutsu" (fencing), "Jiujutsu," and wrestling. Presents of various articles from home and abroad have given them great pleasure, and been a great incentive to renewed energy for their country's cause. Journals, papers and books sent by friends from every part of the world have been received from relatives and friends at home. Japanese ladies, and foreign ladies living in Japan,

have been very active in works of benevolence for the men at the front, and this has been much more the case in the present war than it was in the China war ten years ago.

Hospital Ships.

In the present war we have had two specially fitted hospital ships, the sister vessels "Kobe-maru" and "Saikio-maru." They are ships of about 3,000 tons each, and each contains 186 beds, of which 18 are for infectious cases, and 12 for officers.

My idea at the beginning of the preparations was that it would be better to have two hospital ships of from 3,000 to 4,000 tons each, rather than one ship of larger dimensions. By having two ships we can make better provision for the speedy transference of our patients from the sick-berth of our warships to the wards of the base hospital where they can be treated with greater chances of success.

We have not attempted during the present war to transfer our patients by bringing the hospital-ship alongside of the man-of-war for that purpose. We have merely brought her somewhere near, and sent our patients across by steam launches or boats. We found that sick men's hammocks were the most convenient vehicles for transferring our patients from the ships to the boats.

The proper employment of hospital ships entails much thought and consideration from the Surgeon-in-Chief of the Fleets. Except at the battle of the Yellow Sea we had no need to send our wounded directly from the warships to the hospital ships. Our hospital ships were always stationed at the base during action; the Russians allowed theirs to accompany their squadrons, but unfortunately had but little opportunity of availing themselves of their services.

Infectious Diseases and Their Prevention.

The only infectious diseases which made their appearance on board our ships during the campaign have been enteric fever and dysentery. Cases of enteric fever will occur sporadically on war vessels even during peace-time. Typhoid fever showed no special increase during this period; whenever a case occurred the possible sources of entrance for the morbid germs were carefully investigated, but never with success. We are quite sure that the virus has in every case come from outside, and not been in the ship itself. We infer this from the fact that we have never had more than three or four cases occurring on any ship at any one time. The total number of typhoid cases from the beginning of the war to the end of June, 1905, has been 241. Whenever typhoid cases appear they are at once sent on board the hospital ships and everything in the way of bedding, clothes, etc., likely to have come in contact with the patient is thoroughly disinfected.

A few cases of dysentery broke out in the fleets during August and September of last year, while our ships were engaged in the blockade of Port Arthur. This outbreak caused us much anxiety for the time, but, thanks to the strenuous labours of our surgeons, the danger soon passed

over. I believe that flies were responsible for the outbreak. These insects invaded the ships in enormous numbers whenever colliers or transports were brought alongside, and whenever boats were sent to inspect Chinese junks they invariably brought back clouds of flies with them. Everything was done on board our ships to exterminate the flies, and orders were given to have all food thoroughly well cooked before eating. in due time the dysentery disappeared. The total number of cases of dysentery in the whole fleet amounted to 151 during the period ending June, 1905.

Battles and Dates	Numbers	Killed	Wounded	Total	Termination of the Wounded			
					Deaths	Recovery	Invalided	Under Treat.
Attack upon Port Arthur..... (Feb. 9, 1904).		3	69	72	6	59	3	1
Batlte of the Yellow Sea..... (Aug. 10, 1904).		65	161	226	6	133	17	5
Battle off Ulsan Bay..... (Aug. 14, 1904).		36	96	132	10	80	3	3
Naval Artillery Brigade..... (From June 26 to last day of Dec.)		30	313	343	27	258	20	8
Battle of the Japan Sea..... (May 27 and 28, 1905).		88	611	699	29	470		112
Other petty Battles and Accidents ..... (1904-05).		1,669	541	2,210	39	470	30	2
Total		1,891	1,791	3,682	117	1,470	73	131

GALL-STONES AND DIGESTIVE DISTURBANCES.*

By L. BREISACHER, M. D.,
Detroit.

Despite the fact that during the last ten years, our knowledge of the pathology and treatment of gall-stones has been greatly enriched by truly classical investigations by both surgeons and physicians, and that our methods of the rational diagnosis of this difficulty have been much refined, gall-stone disease today as in the past, still presents at times such misleading and dualistic symptoms that we may well term it the Proteus of abdominal diseases. Gall-stone disease often presents itself to us in various garbs, but to make matters worse, other diseases frequently simulate this difficulty so as to evade our most acute methods of diagnosis. From the very beginning of the recognition of gall-stone disease, certain symptoms referable to the digestive tract, such as nausea and vomiting, have been referred to as an accompaniment of this difficulty, and while during the last few years several clinicians have dwelt to some extent upon the accompanying digestive disturbances, they have not sufficiently defined them, nor have they interpreted

*Read before the Wayne Co. Med. Society and the Tri-State Med. Society.

them clearly enough. It will be my object to emphasize these points in the light of recent investigations aided by my own clinical experience. European statistics founded upon a great many operations and post-mortem examinations, have shown that—at least in Europe—every tenth individual (male or female), and every fourth woman has gall-stones, but that only in about 5 per cent. of all cases, do these gall-stones give rise to symptoms which lead to their detection. It is the impression of some American physicians that one case in every twentieth individual or even less, would more accurately approximate the correct percentage of gall-stone cases in America than the figures of European statistics. Unfortunately, however, we are not in possession of any accurate American statistics on this subject.

On the other hand then, we have the fact of the difficulty of clearly recognizing in all cases, gall-stones when they induce symptoms, and on the other hand the fact of the existence of gall-stones in every tenth or every twentieth individual and the development of symptoms in only about 5 per cent. of all cases, truly a fertile theme for discussion, not only for the physician, but also for the medico-legal specialist. How can we estimate at what moment an individual may have an outbreak of gall-stone colic and how can we determine the length of time gall-stones may have existed? It is now generally conceded that in the great majority of cases, gall-stone formation results from a catarrhal inflammation of the gall bladder and ducts induced by a bacterial invasion. Surgeons occasionally encounter cases of cholelithiasis in which the bile is sterile, but the majority of cases show a bacterium coli, staphylococci or streptococci invasion.

The most prominent predisposing causes of gall-stone formation are:—(1) age (gall-stones rarely occurring in individuals under 20 years of age, although one case is recorded of a child of 10 years of age and several between 16 and 18); (2) pregnancy; (3) constipation, which is present in 80 per cent. of all cases; (4) tight lacing; (5) lack of exercise; (6) any circumstance which interferes with the normal emptying of the gall bladder; and finally I should like to add to this list of causative factors, gastro-intestinal and metabolic disorders.

One of the most important symptoms of gall-stone disease is pain. In my cases the pain has varied between a degree which might simply be termed slight discomfort and the most severe paroxysms of colic. I have never seen a case of gall-stone disease in which pain was absent although Merck claims to have seen it in only 50—60 per cent. of his cases. The pain may be referred to the gall bladder, but in my experience, rarely, oftener it is referred to the epigastric and hypogastric regions. Many cases are on record where the pain was referred to the right iliac region, the legs, back or neck, and I have seen one case in which the pain was referred to the left hypochondrium.

The question as to the direct cause of pain in cholelithiasis has occasioned a great deal of controversy, some contending that it is due to inflammatory processes alone, while others again believe it to be due to the impaction and contraction of the gall bladder and ducts. The spas-

modic nature of the pain seen in some cases, indicates, I believe, that it is due either to the alternate contraction and relaxation or to the alternate distension and normal recontraction of the gall bladder and its ducts.

Jaundice, which is thought by some to be one of the cardinal symptoms, I have seen in only a few cases. Kehr estimates that it is present only in 20 per cent., and Aldor, in but 10 per cent. of all cases.

Enlargement of the liver and distension of the gall bladder alone or together, take place where there is decided stone impaction, but these symptoms are by no means constant.

Putty colored stools with constipation may be present at times, while vomiting, nausea and flatulence are more constant accompaniments of acute gall-stone disease, although of no definite diagnostic value.

Now, as I have already indicated, one or all of these symptoms may be absent at one or another period of gall-stone disease, but may finally make their appearance and justify a diagnosis of gall-stone disease. Where the pain is not referred to the right hypochondrium, and in the absence of other diagnostic symptoms the difficulty may be and has often been mistaken for appendicitis, pancreatitis, gastric ulcer, floating kidney, duodenal ulcer, gastralgia, enteralgia, displaced and dilated stomach, lead colic and subphrenic abscess, and vice versa, these difficulties have been confounded with gall-stones. So too, there are cases recorded of the conjoint occurrence of gall-stones and gastric ulcer, gall-stones and kidney stones, and in my experience particularly, the occurrence of both permanent digestive disturbances and gall-stones.

This latter point has never been mentioned by writers upon this subject. A few observers have called attention to the occurrence of transient gastro-intestinal disturbance during an attack of gall-stone colic, but singularly no one has pointed out the persistence of digestive disturbance between the attacks of gall-stone colic. Later on, I shall refer to this point again. Kehr has encountered numerous cases of colic which lead to the diagnosis of gall-stones, in which surgical interference finally proved the difficulty to have been one of adhesion between the intestines and gall bladder. Only recently a case of mine which had exhibited gall-stone symptoms was operated upon but the difficulty was found to have been one of simple adhesions. Separation of the adhesions effected an absolute cure. Instances of this kind are of quite common occurrence. Thus Tyson records a case in which operation was performed for gall-stones, in which the gall bladder was found to be absolutely free from stones, but adhesions had formed between stomach, bowels and gall bladder. Billings mentions two cases which were operated upon for gall-stones, in which no gall bladder difficulty of any kind was found, the simulation of gall-stone colic being produced by the gastric crises of locomotor ataxia.

Numerous other instances might be detailed, these, however, will sufficiently serve the purpose of this paper. The diagnosis of gall-stone disease presents no great difficulty when the pain which, by the way,

need not be of any particular character, is located in the right hypochondrium, when the liver is enlarged, the gall bladder distended, jaundice present, stools putty colored, and there is pain or tenderness on pressure in the right hypochondrium. When the stone obstructs the cystic duct or remains in the gall bladder, we never have enlargement of the liver. Even in cases of obstruction of the common duct, enlargement may be entirely absent. The symptoms of pain on pressure in particular, is of the greatest importance, and is often sufficient to justify the diagnosis of gall-stone disease. Boas lays considerable stress upon the existence of sensitive spots on either side of the 12th dorsal vertebra. This symptom, however, is not absolutely reliable, being absent in some cases of gall-stone disease, and present in abdominal abnormalities other than those of the gall-bladder. Stones when present in the stools, are of significance, but in the majority of instances they are absent, or at least escape detection.

It has been stated by several writers that in some cases of gall-stone disease, symptoms consisting of a feeling of fullness with flatulence and slight gastralgia may exist for years, which may be diagnosed as nervous gastralgia, but which will prove to be nothing more than cholelithiasis.

Tempting as a conclusion of this kind may be, it is hardly a logical one, and the question arises whether we cannot, with as much right, look upon the digestive disturbance as the cause of the gall-stone formation, as to conclude that the latter was the cause of the former. And in fact, we have strong supportive evidence of the possibility of the correctness of this view.

It is conceded that the latent gall-stone is harmless. Only when an inflammatory condition arises in the gall bladder or ducts do gall-stones occasion any difficulty.

Kehr has found that in nearly all of his operations upon the gall-bladder after an attack of colic, there existed an inflammatory condition of the bladder and its ducts. Now this inflammatory condition, as we have seen, may be induced by various causes, but the one cause, which is undoubtedly as fruitful as any, is a duodenitis either primary or secondary to a gastritis. It is this point which I particularly wish to emphasize. If we bear in mind the fact that, in Europe, every 10th individual, and in America probably every 20th individual carries gall-stones in his gall bladder, and that only a small percentage of all cases develop symptoms of any kind, it is decidedly illogical to conclude that where gastric symptoms precede, for a year or longer, an outbreak of gall-stone colic, that it was the result of dormant gall-stones, and to assume that the difficulty was gall-stone disease from the very inception of the digestive symptoms. And yet this construction is often, and I think, wrongfully, put upon a case of this kind. A gastritis and duodinitis can more logically be looked upon as the precursor of gall-stone colic or even as the cause of the formation of gall-stones, than to assume that gall-stones, when they are discovered a year or longer after the existence of digestive disturbances, were the cause of the symptoms of the latter.

When we consider that gall-stones may develop in the course of three or four months, it becomes apparent that we cannot offhand burden gall-stones, when they happen to occasion symptoms, with the responsibility of having occasioned every digestive disturbance which may have previously existed in the individual.

Several observers, including Hemmeter and Boas, originally stated that hyperchlorhydria was never present in gall-stone disease.

However, during the last few years, a number of observers have demonstrated the existence of hyperchlorhydria, in some cases during the height of gall-stone attack. In the great majority of my cases of mixed gall-stones and digestive troubles which I have seen during the last nine years, the existence of hyperchlorhydria was demonstrated.

Unlike a number of observers, I have seen some cases in which the hyperchlorhydria persisted between the attacks of colic. So too, I have seen other gastric symptoms, such as nausea and vomiting, feeling of pressure with flatulence, and impaired gastric motility persist between the periods of gall-stone colic.

In fact, I have seen several cases in which the course of the digestive trouble seemed to indicate its primary existence, independent of the presence of gall-stones, or, if the digestive symptoms were secondary that they could at least persist during the intervals of the gall-stone colic. But yet in another manner are digestive disturbances of significance in gall-stone disease.

Digestive disturbances may not only directly pave the way for an infection which may lead to the formation of gall-stones or the development of gall-stone colic where dormant stones exist, but they may also act as a causative factor through the absorption of abnormal digestive products which, circulating through the hepatic system, may set up an irritation leading to a catarrhal inflammation of the gall-bladder and ducts.

It is quite probable that gall-stones, like other sources of reflex irritation, may give rise to gastro-intestinal disease, lasting either only during the colic, or when once it has developed even during the periods of attacks of colic. It might be claimed that even the dormant stone may give rise to gastro-intestinal disease. But Kehr cites a case to illustrate the true latency of gall-stones, which will very well answer our purpose. Kehr states that gynecologists often find in operating for other disorders, a gall-bladder filled with stones, and on questioning the patient after the operation in reference to the previous existence of pain in the abdomen, colic, etc., usually receive the answer:—"I have no recollection of having suffered pains of that description, my appetite was good, I did not vomit, and experienced no pain." This statement coming from Europe's greatest gall-stone operator is certainly worthy of consideration, and we may conclude that so long as the gall-bladder and its ducts remain free from inflammatory change, no visible symptoms are produced by dormant gall-stones. This, then, is my experience with and my conception of gall-stone disease in reference to digestive disorders. There simply remains the consideration of the treatment of these cases.

It is my opinion that if we ate and drank more carefully, and daily took proper exercise, looked after the condition of our bowels, and that if women laced less, we would not encounter gall-stones as often as we do at the present time. Diet is of significance in so far that it should be simple and nutritious and should be adjusted according to the digestive condition of the stomach and bowels as determined by careful gastro-intestinal examination.

The statement made independently by Naunyn, Aldor and others that qualitatively, food is of no significance, certainly is not borne out by my experience. Not that I believe in dietetic cures in the sense in which they are often recommended by physicians at health resorts and in private practice. Some of these cures exclude fats, some exclude carbohydrates, others again meat, and still others, milk. Up to the present time we have not discovered a stone dissolving diet nor have the supposed solvent action of olive oil, turpentine, chloroform, salicylate of soda, phosphate of soda, probilin, eunatrol, rectal douches and oil injections ever been demonstrated. Neither have massage, electricity, gymnastics and horseback riding ever deserved a serious recognition as a therapeutic means of mechanically dislodging gall-stones. This latter treatment, indeed, is dangerous in the extreme, and medicinal treatment may also become dangerous if the case has reached a stage at which operative measures are indicated and the question here arises where medicinal treatment should begin and where it should end and give way to surgical means. Not every case of gall-stones by any means requires surgical interference, notwithstanding the fact that many surgeons incline to the belief that it is the only justifiable means of relief. Wm. Mayo estimates the mortality in gall-stone operations at 3 per cent., while Kehr's 720 operations show a mortality of 2 per cent., yet Kehr writes:—"If the danger were zero, it would be our duty to operate on every sufferer from gall-stones after his first biliary colic, but since we can never know in advance whether the patient will belong to the 98 per cent. who are cured, or the 2 per cent. who die, we must stop at prophylactic operations." Such conservatism as this coming from one of the greatest gall-stone operators, is certainly worthy of emulation. If all surgeons showed the same liberality and if physicians were less anxious to prolong the medical treatment of these cases after they have reached the border land of surgery, there would be less misunderstanding between these two departments of medicine.

"Mere presence of gall-stones does not call for operation—only resulting conditions require it," says Kehr, and in another place, he states:—"I do not often operate in acute obstruction of the common duct, when seizures have always disappeared with jaundice and the passage of stones, and when complete latency has been established between the attacks of colic." These surgical views of Kehr form a very satisfactory compromise between the ever-ready surgeon and the never surgically inclined physician. In medicinally treating individuals suffering from gall-stone disease, we must bear in mind that the sole object of such treatment is to render the disease latent. If we succeed in this respect, our patient will belong to that class to which 95 per cent. of all

gall-stone cases belong, for, as is very probable, only about 5 per cent. of all cases show appreciable symptoms. To render a case of gall-stone disease latent, it is necessary to combat the gastro-intestinal trouble by the diet and medication called for by a careful gastro-intestinal examination. Absolute rest should be enforced and an attempt be made to set up an active flow of bile. This is best accomplished by feeding the patient often, five or six times each day, for we have learned that the passage of food from the stomach, especially when of normal acid reaction, is an efficient and active cholegogue. The bowels should be kept moderately open, and to effect this and at the same time to allay the general gastro-intestinal congestion, nothing succeeds better than the liberal drinking of warm Carlsbad water, either at Carlsbad or at home. The efficiency of Carlsbad water has been recognized by both physicians and surgeons, and among the latter, Kocher and Kehr stand at the head. It must be remembered, however, that, like other medicinal means Carlsbad water does not dissolve the stones, its administration is only favorable in allaying inflammation and bringing about latency.

Another efficient means recognized by several gastro-enterologists is gastric lavage, which allays irritation and induces an active flow of bile. The drinking of large quantities of water is beneficial, provided the gastric motility is intact, although it is doubtful whether it really increases the flow of bile, or not.

Deep breathing which is an efficient mechanical cholegogue, may be resorted to as also hot and cold douching over the hepatic region, and the application of moist heat in the form of an abdominal compress. All other harsh mechanical measures such as massage, etc., are contra-indicated.

Belladona or atropine may be used as relaxants of the involuntary muscle fibers, but opium and its derivatives should be used only in cases of absolute necessity. Numerous patients of mine treated along this line, have been free from gall-stone difficulty for years, and, although many gall-stone patients require operative interference, my experience has taught me that it is by no means necessary or justifiable to operate on every case of gall-stone disease.

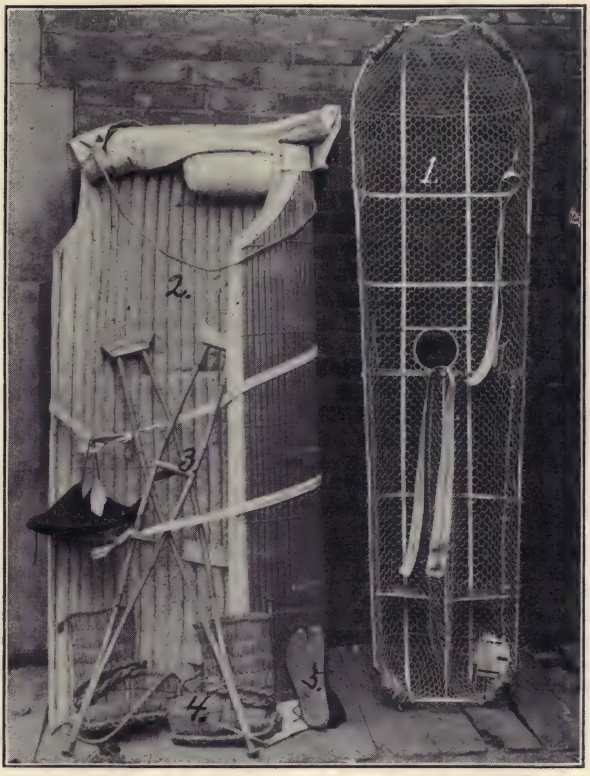
71 Washington Avenue.

NEW DEVICES EXHIBITED BEFORE THE ASSOCIATION OF MILITARY SURGEONS.

By J. F. HARTZ.
Detroit, Mich.

Dr. Stokes' New Aseptic Stretcher as Designed by Him to Use in the United States Navy. This is made of plaited galvanized wire; hence is clean, light and thoroughly aseptible. It is provided with foot rests which can be adjusted to any sized person so as to prevent damage to the perineum by the partition as shown in cut. The two lower partitions also serve

as splints for both legs. Legs can be incased with roller bandages so as to make a perfect splint, for transporting patient without injury. Patients are strapped around the pelvis and under the axilla to hold them in place while being carried through small doors or lowered to any part of the ship. This can be handled by one person on ship-board as they are provided with sleigh runners and can be pushed like a wheel-barrow on a smooth surface. They are equally serviceable for mines and railroad purposes as they can be taken through small openings. Six of these



stretchers could be carried in the ordinary ambulance in case of necessity. The article is made very strong and bids fair to take the place of many of the stretchers in use.

We also illustrate the Japanese articles as exhibited at the recent Military Surgeons' Convention, and brought to this country by Surgeon-General Suzuki, of the Japanese Navy. These have been presented to Surgeon-General Rixey, of the United States Navy, to show the stretcher (2) as recently used in the war with Russia. The stretcher is made of split bamboo rods knitted together by a strong cover, and well padded on the inside, so that the injured man can be transported with

little harm and made as comfortable as possible until after the engagement. It seems that the practice is to remove men to the hospital ship where better facilities are provided; hence the injured are better preserved awaiting removal. This is done with the idea of preventing secondary infection.

The crutches (3) shown are likewise made of bamboo rods and are ingeniously made, weighing about one-half as much as the American make of crutches, and are sufficiently strong. The arm-pieces are made of wood as light as cork. The shoes (4) illustrated at the bottom of the picture are used by the Japanese seamen in cold weather, and are principally designed for men in torpedo boats who experience great difficulty in keeping their feet warm under water. The rubber-soled cloth shoes (3) with cloven sole are made in this manner to facilitate climbing.

Spirillum in Syphilitic Lesions.

Richards and Hunt (Lancet, Sept. 9), describe their investigations in syphilis, verifying the presence of the spirillum first found by Schaudinn and Hoffmann. In the secretion and superficial parts of primary lesions they found a thick, slightly spiral, organism, while in the deeper parts the organism was thin, long, and with many spiral turns. In the secondary stage of syphilis they drew blood from the macules and by Giemsa's stain demonstrated the same form of spirillum as found in the deeper part of the primary sore. In all cases where the organism was found in the initial sore the typical secondary rash developed later. The authors believed the spirillum is diagnostic of specific disease.

Responsibilities of Surgery.

M. H. Richardson, Boston (Journal A. M. A., October 7), in his chairman's address before the Section on Surgery and Anatomy at the Portland Session of the American Medical Association dwells especially on the importance of the qualifications of the surgeon, both by education and practical training, diagnostic ability, operative judgment, technical skill and in after-management of the case. He thinks that too many physicians who lack both training and surgical judgment try to be surgeons, and that even in small places surgical practice should be confined to one or two competent men who, in turn, should give up their medical cases to their non-surgical brethren. He gives illustrations in support of his views, and thinks that suits for damages, unjust as most of them are, may in the end, work out the proper solution of the problem. It is these that bring out the responsibilities of surgery more than anything else. The responsibilities for advising operation, for performing it and for after care are greater than skilled surgeons often realize, an example, the interval operation for appendicitis, which is commonly called a perfectly safe operation. He asks what should be the education of the surgeon, and besides the mental qualities of hopefulness and endurance he mentions manual skill, which alone, however, is of little value without the finer mental qualities that permit of accurate decisions from intelligent observation. The surgeon should be a mechanic and should have a thorough knowledge of practical anatomy and of pathology, but the chief preparation must be in the direct contact with patients, and the best preparation that a man can have for becoming a practical surgeon, he thinks, is being an assistant in a hospital. Four, five or six years of this, he thinks, is little enough.

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The Visiting Nurses.

The auspicious opening of the home of the Visiting Nurses Association in Detroit is a matter for congratulation by the medical profession of the city as well as by citizens at large. In a quiet and unostentatious manner these nurses have done a great deal for the relief of the poor and sick of this city. Few charities are better designed or more intelligently carried out than this one. Few are so little subject to abuse.

With these facts in mind it is to be deplored that the physicians of Detroit have availed themselves so little of the excellent help which these nurses can afford. The Association is ready to do more work when they have it to do. We believe that the only reason these nurses are not more often called upon by physicians is that the latter have not had their attention called to the opportunity. Any physician having a poor patient who needs attention which is not given, can obtain for that patient the services of a first-class trained nurse free of charge for as long as may be necessary. There is no red tape. One simply calls the Home by telephone (Grand 2256), and makes the request. In urgent cases a nurse can usually be sent at once.

Another class of cases in which these nurses are particularly serviceable is the ill who, while not at all charity cases, can hardly afford to pay a nurse for her exclusive services. The residents of boarding-houses are often in want of care. They are usually very glad to pay twenty-five cents a visit to a nurse.

Few prescription can be of so much actual comfort to a poor and ailing person as the cheery visit of a helpful, unmeddlesome, intelligent nurse.

Re-organization of the Red Cross.

The re-organization of the American Red Cross Society is now well under way. The Red Cross is the greatest society of first aid in the world. Every civilized country has a national branch. All large governments acknowledge its place and give official aid in the carrying out of its humane projects. The magnificent work of the Japanese national society has recently been described by George W. Kennan in The Outlook. The American society, however, had fallen into a state of decrepitude. Officials who had done valiant service had been too long continued in office and the society suffered from inertia. It has been reorganized, however, under the direction of the Secretary of War, and the organization of the Michigan branch is now progressing.

The chief work of this society is to furnish physicians and supplies in cases of wide-spread disaster and destitution, passing the ability of local aid to supply. The society now wishes physicians to volunteer for service in the organization. In another column we print a request from the society. It provides an opportunity for patriotic and charitable labor of great practical use. The society should experience no difficulty in obtaining its staff of physicians.

Medical Literature.

It is to be regretted that all people cannot gain equal proficiency in the use of our language. Medical literature has a dearth of writings that are couched in graceful style, forceful diction, and good usage. It is even common to find glaring grammatical errors. Remarkable power is gained for Osler's Practice of Medicine and Foster's Physiology by excellent literary form; imagine then the power that is lost in a contribution that blunders. It is exceedingly difficult for a writer to command attention if he commits sins against his language, and if they are sins of carelessness there is no imaginable excuse. Ignorance is condoned only with reluctance, but carelessness not at all. Every one is not able to write with good style or individuality, but every one is certainly able to at least use care in what he presents. Medical literature improves yearly, but it still needs much attention. No abstract, no book review, no case report, no news item is too insignificant to deserve care and pains in its composition.

TRANSACTIONS OF SOCIETIES

Program Wayne County Medical Society.

November 6.

Status Lymphaticus: Its Significance in Sudden Death Following Serum Injections, and in the Treatment of Diphtheria. Dr. A. P. Ohlmacher.

Discussion: Dr. Johann Flintermann, Dr. Herbert M. Rich.

November 13.

Possibilities and Limitations of Laboratory Diagnosis. Dr. Joseph Sill.
Discussion: Dr. W. F. Metcalf, Dr. Delos Parker.

November 20.

Consultations: Dr. E. L. Shurly.
Discussion: Dr. Leartus Connor, Dr. Hal C. Wyman.

November 27.

Surgical Section—

Non-Meddlesome Gynecology. Dr. Hunter Robb, Cleveland.
Discussion. Dr. W. P. Manton, Dr. J. H. Carstens.

DETROIT ACADEMY OF MEDICINE.

The annual meeting of the Detroit Academy of Medicine was held on Oct. 11th at Wolfe's, the Academy on this occasion being the guests of Dr. Wadsworth Warren. A pleasant ride on the Lake was followed by a frog, fish and chicken supper. The election of officers was as follows:

President, Dr. Wadsworth Warren.
Vice-President, Dr. J. A. Winter.
Sec. and Treas., Dr. Harrison D. Jenks.
Director for two years, Dr. Leartus Connor.

The regular monthly meeting was held on Oct. 24th, when Dr. C. D. Aaron read a paper entitled "Treatment of Gall-Stones with Chologen. Report of Cases."

The Lapeer County Medical Society met at Dryden on October the 4th. Dr. Reuben Peterson, of Ann Arbor, presented a paper. Officers were elected for the ensuing year as follows:

President, Dr. G. W. Jones.
Vice-President, Dr. W. J. Kay.
Secretary, Dr. H. E. Randall.
Treasurer, Dr. I. D. Parker.

THIRD COUNSELLOR DISTRICT MEETING.

The first meeting of the Third Counsellor District Medical Society was held in Battle Creek Oct. 18th. About one hundred physicians were in attendance from the counties of Calhoun, Eaton, Cass and St. Joseph. Dr. Inglis and Dr. Biddle, of Detroit, and Dr. M. Wilson, of Port Huron, were also present. The morning was devoted to clinics. Dr. J. H. Kellogg, medical director of the sanitarium, demonstrated his new external and internal ligament operation and performed two minor operations. Dr. J. F. Byington removed a septal cartilage by sub-mucous resection. Dr. Sleight operated on a case of strabismus. Dr. T. B. Sands presented a case for diagnosis. The scientific programme was held in the afternoon. In the evening a vegetarian banquet was furnished by the sanitarium and was attended by about 200. Dr. Taylor, of Jackson, acted as toastmaster. Among those who responded to toasts were Dr. Inglis, of Detroit, Dr. Eugene Miller, of Battle Creek, Dr. McMullin, of Cadillac, Dr. Wilson, of Port Huron, Dr. Rockwell, of Kalamazoo, Dr. Wilson, of Jackson, Dr. Dodds, of Big Rapids, and Dr. Kellogg, of Battle Creek.

FOR SALE: Physician, doing large general practice, is about to confine his work entirely to a specialty. Will sell his fine brick residence, situated in half-mile circle of City Hall. First floor contains drawing room, large library, dining room, kitchen, pantries, etc. Wing with separate entrance has large reception room, also separate room for secretary's office, and private office. Five large sleeping rooms upstairs with bath. Large brick barn, 50x22, having ample coachman's quarters. Those meaning business apply to X. Y. Z., Care Detroit Medical Journal.

Request for Volunteer Physicians and Nurses.

The Michigan Branch of the American National Red Cross Society is now being organized in pursuance of the plan for State Societies as provided by act of Congress. It is desired that there be one or more physicians in each Congressional District who will hold themselves in readiness to respond to emergency calls at the direction of the State Executive Committee. When assigned to duty the compensation will be at the rate of one hundred and fifty dollars per month in addition to transportation and subsistence. Applications are requested from volunteers who are willing to enroll for this work. School and year of graduation should be stated.

Applications will also be received from trained nurses for similar service. Their compensation will be at the rate of forty dollars per month when on duty in the United States, and fifty dollars per month when without the limits of the United States, in addition to transportation and subsistence.

Address, C. G. Jennings, M. D., Chair. Executive Com., 457 Jefferson Avenue, Detroit.

Dr. Cornell, of Coldwater, has moved to Bronson.

Dr. F. E. White, of Saranac, has moved to Lowell.

Dr. W. P. Mowry, of Sturgis, has moved to Batavia.

Dr. J. F. Milne, of Muskegon, has moved to Cement City.

Dr. G. W. Shipman, formerly of Detroit, has moved to Charlotte.

Dr. W. H. Betteys, formerly of Hancock, has located at Houghton.

Dr. C. B. Lashuay, of Monroe, has located at 1128 Jos. Campau Avenue, Detroit.

Dr. C. A. Montague, of Charlevoix, is taking a post-graduate course in Chicago.

Dr. Conroy has returned to Battle Creek after spending the summer in London and Paris.

Dr. and Mrs. A. G. McLeod, of Red Jacket, have returned from a six months' visit to Europe.

Dr. O. B. Weed, lately of Cheboygan, has moved to Detroit and located at 158 E. Kirby Avenue.

Dr. Geo. Sackrider has taken the practice of Dr. Harper at Henderson who moved to Detroit.

Wanted—A physician to locate in New Boston, Mich.; for particulars address Mr. Thomas Wilson.

Dr. Glenn Stockwell, of Pontiac, has begun practice in Detroit in association with Dr. Ben Brodie.

Dr. Geo. P. Raynale, of Birmingham, has moved to Detroit and opened an office on Horton Avenue.

Dr. and Mrs. Albert H. Steinbrecher, of 410 Woodward Avenue, have returned from their trip to Europe.

Dr. F. W. McHugh, of Ontonagon, has been appointed county physician to succeed Dr. A. L. Swinton.

Dr. D. M. Cowie, of Ann Arbor, has been appointed Instructor in Pediatrics, being the first to hold that office.

Dr. R. Turner, of Flat Rock, for many years surgeon in the U. S. army, expects to locate at Harbor Springs.

Dr. H. R. Niles, for the past ten years assistant physician at Oak Grove Hospital, Flint, has located in Grand Ledge.

Dr. Chas. W. Edmunds, of Ann Arbor, who spent the summer in Heidelburg, has returned to his work in the University.

The Clinton County Medical Society met in St. Johns on October 5th. Dr. W. F. Metcalf, of Detroit, read a paper.

Dr. J. Allan Cross, of Orion, has gone to Chicago to take a post-graduate course and will then settle in Youngstown, O.

Dr. J. H. Carstens was elected president of the Mississippi Valley Medical Association at its recent meeting in Indianapolis.

Dr. E. G. Gray, who graduated at Ann Arbor last June, has located in Ludington and will have his office with Dr. W. H. Taylor.

Dr. A. B. Grant, of Albion, was elected president of the American Association of Orificial Surgeons at its recent meeting in Chicago.

Dr. John Wessinger, of Ann Arbor, has been appointed to the Health Board in the place of Dr. T. B. Cooley who has moved to Detroit.

Dr. Albert Henwood, a recent graduate of the Detroit College of Medicine, has located in Dowagiac in association with Dr. G. R. Herkimer.

Dr. J. E. Clark has been elected to the newly established professorship of medico-legal jurisprudence in the Detroit College of Medicine.

Eastern capitalists have leased the Phelps Sanitarium at Battle Creek and will convert it into a physical culture and surgical institution.

Dr. C. C. Slemon, of Sherman, has moved to North Branch where he will take the practice of Dr. E. B. Weed who goes to California for his health.

Dr. Daniel Todd, of Adrian, has been appointed pension examiner for Lenawee County to fill the place made vacant by the recent death of Dr. Hull.

Dr. Norway, of Stevensville, has sold his practice and gone to California because of ill-health. Dr. Metcalf, of Chicago, will undertake his practice.

Dr. Geo. W. Trumbull, who graduated last year from the Detroit College of Medicine, has located in Bay City.

Dr. Hal C. Wyman read a paper on "Injuries of the Head" before the Lenawee County Medical Society which met at Adrian on October 10th.

Dr. W. Elmer, last year assistant in medicine in the medical department, of the University at Ann Arbor, is now instructor in medicine in the University of St. Louis.

Dr. L. J. Lennox and daughter, while riding in an automobile on October 7th were struck by a Woodward Avenue car and thrown to the sidewalk. Fortunately they both escaped serious injury.

Dr. David Inglis, president of the State Medical Society, delivered an address on "The Physician and the Commonwealth" before the Shiawassee County Medical Society at Owosso on October 10th.

Dr. B. D. Harison, of the Soo, was re-elected secretary of the State Board of Medical Registration at its annual meeting October 15th. **Dr. Oscar LeSeure,** of Detroit, was elected presiding officer.

Dr. C. A. Lenhard has begun a $5,000.00 suit against the Detroit United Railway and their physician, Dr. Ben P. Brodie, for services in caring for persons injured in the Belt-line accident October 26th, 1899.

A plant to cost $10,000 is being erected at Northville in connection with Gov. Warner's cheese factory at that point for the manufacture of a special line of milk products used by physicians. The plant is being erected by the Ramage Technical Company, of Detroit.

Definite steps have been taken towards the erection of a County Hospital in Pontiac. A Ladies' Hospital Association has been organized and it is hoped that the residents of Oakland County may soon be able to command the advantages of a good small hospital.

Dr. Harry D. Hull, of Adrian, who died recently, provided in his will for a $3,000.00 lavatory for the city. He also created a fund to keep in repair the grounds and monuments of Oakwood Cemetery. The will also provides that the accounts outstanding against patients shall be destroyed.

An interesting lawsuit has been started in Presque Isle County. Dr. N. C. Monroe sold his practice at Millersburg to Dr. Gibson and agreed not to engage in the practice of medicine in that county for a certain period of time. He has now located at Rogers City and Dr. Gibson has invoked the aid of the law.

Dr. Alfred I. Noble, of the Massachusetts Hospital for Insane, Worcester, has been elected superintendent of the Michigan Insane Asylum in Kalamazoo to fill the vacancy caused by the death of Dr. Wm. M. Edwards. Dr. Noble has been connected for some time with this line of work and comes with the highest recommendations. He will assume his duties at Kalamazoo on January 1st.

The Adrian Medical-Surgical Institute is being investigated by the Government postal authorities, and their mail has been stopped. It is intimated that fraudulent use of the mails has been proved. Dr. Jos. I. Durham was the principal physician and is said to be a graduate of a Cincinnati medical school.

Dr. V. C. Vaughan, of Ann Arbor, delivered the opening address before the Medical Department, University of Toronto, October 4th. The subject of his

address which may be found in full in The Canadian Journal of Medicine and Surgery for November, was, "Some New Conceptions of the Living Cell; Its Chemical Stricture and its Functions."

Dr. Wm. K. West, of Calumet, has been appointed head physician of the Copper Range Consolidated Mines. Dr. West will be chief of the Range Staff and in that capacity will be the head of the new hospital which is now being built at Trimountain. Dr. West has been on the staff of the Calumet & Hecla Mines for sixteen years and is one of the best known physicians in the Upper Peninsula.

Dr. Thomas S. Boyd, who sued the city of Detroit for services performed six years ago, has been awarded a verdict for $150.00 by a jury in Judge Brooke's court. Boyd claimed that he acted as secretary at several meetings on the order of James H. Pound, then president of the Board of Health, and afterwards tabulated the annual health report, the latter work being done at the request of Health Officer Henneage Gibbes.

The splendid new home of the Visiting Nurses Association, of Detroit, was first opened for a reception on October 1st. The building which has the appearance externally of a handsome residence is located next to the Woman's Hospital on Forest Avenue. The Association owes the house and all its furnishings to the generosity of Mrs. Tracy McGregor. It promises to be of great assistance in the work of this association.

MARRIAGES.

Dr. Geo. M. Livingston, of Manistique, to Mabel A. Joy, Albion, June 28.

Dr. Chas. B. Morden, of Pigeon, to Miss Jessie Louise Strong, of Adrian.

Dr. Patience S. Bordeau (Archer), of Grand Rapids, to Henry N. Cisco, Sept. 6.

Dr. Lyman I. Brown was married to Miss Martha A. Sturgis on October 18 at Sturgis.

Dr. Everett E. Quirck and Miss Anna L. Kellogg were married in Jackson on October 4th.

Dr. Arthur B. Snow, of Saginaw, was married on October 18th to Miss Myrtelle E. Wortley, of Lansing.

Dr. George Edwards Fay and Miss Theodora Van der Karr were married in Detroit on October 31st.

Dr. John G. Rulison, of Lansing, and Miss Edith J. Benjamin, of Flushing, were married on October 18th.

Dr. E. George Gray, of Ludington, was married to Miss Grace D. Raymond, of Ann Arbor on October 11th.

Dr. Geo. L. Cramer, of Owosso, was married to Miss Edith M. Hackett at Baraboo, Wis., on September 20th.

Dr. Alexander Gordon McPherson, of Grand Rapids, was married on October 3d to Miss Annie Long, of that city.

Dr. Edward R. Taylor, of Benton Harbor, was married on October 18th to Miss Mattie Cogshall, of Benton Harbor.

Dr. Floyd Hamilton Randall, of Bay City, was married on October 18th to Dr. Emma Jean Pearson, of Van Wert, O.

Dr. Esli T. Morden, of Adrian, formerly secretary of the Northern Tri-State Medical Society, was married on October 18th to Miss Florence Swift, of Adrian.

Dr. Henrietta A. Carr, of Eaton Rapids, was married in Indian Territory on May 11th to Capt. Whitney Carr, of Bay City. The marriage was only recently announced.

Dr. Chas. R. Patterson, owner of the Patterson Sanitarium, 316 Bridge St., Grand Rapids, was married on October 24th in Denver to Miss Helen T. Moore, formerly matron at that institution.

DEATHS.

Dr. Geo. W. King, 950 Gratiot Avenue, died of pneumonia, aged 52 years.

Dr. Gertrude E. Norris, a practicing physician at Lansing for twelve years, died on October 18th at the age of 53.

Dr. S. N. Robinson died on October 14th at Grand Rapids after a brief illness. He had formerly lived in Watertown, N. Y.

Dr. Orletus P. Eaton, whose office and drug store were at 291 Jefferson Avenue, and whose residence was at 627 Congress St., Detroit, died of heart failure on his farm near Bloomingdale, Mich., October 4th.

Dr. Frank Owen, of Ypsilanti, died on October 14th in St. Mary's Hospital, Detroit, where he had come for the removal of a small tumor on his arm. He graduated from the medical department at Ann Arbor in 1871. He at once settled in Ypsilanti where he has practiced ever since. Aged 64.

Transmanual Ausculation and Ulnar Palpation.

Riesman in the Penn. Medical Journal for September, calls attention to two methods used by him in physical diagnosis. The effort to time cardiac murmurs has often cost many physicians, even the most practiced, considerable trouble; it is not always easy to determine by the carotid pulsation, while ausculting at the apex, nor is it always possible to feel the apex beat and at the same time listen to it advantageously. Riseman finds that the difficulty is obviated by placing the hand or fingers over the apex impulse and ausculting upon the hand or fingers so placed. Heart sounds, normal and pathological, are transmitted in this way without impairment, and the method enables one to identify a murmur in its relation to systole and diastole.

Another factor in the difficulty of chest examinations is the determination of vocal fremitus. In using the palm of the hand it is often impossible to judge of the limits of an area of diminished or increased fremitus. Riesman uses the ulnar side of the hand, which is very sensitive, and offers a surface far smaller than the open palm. It is especially useful in defining the upper limit of effusions.

BOOK REVIEWS

Progressive Medicine. September, 1905. A Quarterly Digest of the Medical Sciences. Edited by H. A. Hare, M. D. Lea Bros. & Co., Philadelphia and New York. $6.00 per year.

To the September number of this quarterly digest, William Evart contributes a well written review of the diseases of the thorax, including the heart-linings and blood-vessels. William S. Gottheil reviews the subjects of dermatology and syphilis while diseases of the nervous system are treated by Wm. G. Spiller and obstetrics by Richard C. Norris.

There is much of interest and profit to be desired from a careful reading of this resume of recent literature to which is added in many instances the personal experience of the reviewer.

Manual of Chemistry, by W. Simon, Ph. D., M. D., Professor of Chemistry in the College of Physicians and Surgeons of Baltimore, and in the Baltimore College of Dental Surgery; Emeritus Professor in the Maryland College of Pharmacy. Eighth edition. 643 pp. 66 illustrations. Lea Bros. & Co., Philadelphia and New York. 1905.

The author considers the subject under the following heads: 1. Chemical Physics. 2. Principles of Chemistry. 3. Non-metals. 4. Metals. 5. Analytical Chemistry. 6. Carbon Compounds. 7. Physiological Chemistry. The book will attain its greatest value among students of medicine, pharmacy, and dentistry, for whom it is specially intended by the writer. There is a lucid presentation of all facts necessary to such students and it is brought well up to date in this, the eighth edition. The chapters relative to medical chemistry are not complete enough to serve as a reference work for physicians, but the volume as a whole is convenient for graduates as well as students, because it contains under one cover all the essentials of chemistry.

A Text-Book of the Practice of Medicine. By James M. Anders, M. D., Ph. D., LL. D., Professor of Medicine and of Clinical Medicine at the Medico-Chirurgical College, Philadelphia. Seventh edition, revised and enlarged. Octavo of 1297 pages, fully illustrated. W. B. Saunders & Company, Publishers, Philadelphia and London. 1905. Price, Cloth, $5.50 net; Sheep or Half Morocco, $6.50 net.

The seventh edition of this excellent practical text on Medicine shows evidence of careful revision. A half dozen new chapters have been added and paragraphs on many more subjects. Among other new subjects we notice the Stokes-Adams Syndrome, Intestinal Lithiasis, and Rocky Mountain Spotted Fever. The book is pre-eminently of a practical nature, diagnosis and therapy being emphasized. The Diagnostic Tables for showing differential points in tabular form are of assistance to the memory. The new edition appears to have brought the book quite up-to-date in every particular.

A Manual of Diseases of the Nose and Throat. By Cornelius G. Coakley, A. M., M. D., Professor of Laryngology in the University and Bellevue Hospital Medical College, etc., New York. Third edition revised and enlarged. Illustrated. 594 pages. 5x7½. Lea Bros. & Co., New York and Philadelphia, 1905.

Dr. Coakley's manual is an excellent small volume for the student and general practitioner. The specialist should know much more than can be found in this book. The sections on anatomy, physiology, and pathology are very brief. The rarer forms of disease are usually only mentioned. This allows the author, however, to give a very full discussion of the diagnosis and treatment of the more common maladies of this region. Operations on the turbinates, adenoids and tonsils are described in detail, step by step, with great clearness. Instruments are described and illustrated. Actual prescriptions are given. One chapter deals with the nose and throat complications of the infectious diseases, a most important and practical topic. A brief resume of the therapeutics of this region based on the author's own very large clinical experience concludes an excellent type of the practical medical manual. With the limitations above noted, the book is excellent.

The principal change in the new edition is in the chapter on Diseases of the Accessory Sinus.

International Clinics. A Quarterly of Clinical Lectures and Original Articles. Edited by A. O. J. Kelly, A. M., M. D., Philadelphia. Vol. III, Fifteenth Series, 1905. Philadelphia and London. J. B. Lippincott Co. $6.00 per annum.

This excellent quarterly presents as usual an interesting and valuable series of short articles. Among others are adequate reviews of the Therapeutic Uses of the Roentgen Ray, Serumtherapy, Symptomatic Treatment of Tuberculosis, and Ethyl Chloride Anesthesia, the latter with an exhaustive bibliography. McPhedran, of Toronto, furnishes an article on Membranous Colitis, Addison's Disease has a chapter, and Kretz, of Vienna, has an illuminating article on the Pathology of Cirrhosis of the Liver. Other interesting topics are Fracture of the Patella, Acute Anterior Poliomyelitis, Syphilitic Necrosis of the Frontal Bone, Treatment of Hay Fever and Asthma, and Trauma of the Eye in General Practice.

The volume is generously and excellently illustrated.

Diseases of Infancy and Childhood. By L. Emmet Holt, M. D., Professor of Diseases of Children in Columbia University, New York. Third revised edition. 1174 pages, 10x6. Illustrated. D. Appleton & Co., New York. 1905. Price, $6.00 in cloth.

When this text-book first appeared some eight years ago it was soon recognized as the most satisfactory one volume text on the subject. The test of time has only emphasized its value and its right to the above title, not only in the English language, but in any language. In consequence it has reached the remakkable goal of fifty thousand copies in circulation. This is very unusual for texts on this subject.

Among the most important changes in this edition are the articles on Hypertrophic Stenosis of the Pylorus, Diarrheal Diseases and Dysentery, Vaginitis,

Cerebro-Spinal Meningitis, Mental Defects, Chondro-Dystrophy, Status Lymphaticus and Diphtheria. About 25 new illustrations have been added, and all are good ones.

The excellent work done recently on the dysentery bacillus by the Rockefeller Institute and other investigators is epitomized. More space is given to the important subject of pyloric stenosis which has long been recognized in England. The author very properly reserves judgment on the actual curative value of tetanus antitoxin. The new edition serves its purpose of keeping this book without a rival in its field.

Operative Gynakologie. By Döderlein-Kronig, Leipsic, 1905.

This new text-book by two well known German gynaecologists is perhaps one of the most striking things in the German medical literature of the year. The authors have left the well beaten tracks which German text-book writers are so apt to follow, and instead of trying to cover the whole subject of gynaecology have restricted themselves in this field of work.

The book in many respects is distinctly American. It is rich in illustrations—the arrangement of the matter is unusually good and the text and general construction are a credit to the book-maker's art. There is perhaps nothing so useful in fixing ideas as appropriate illustrations. In this respect each operation, and for that matter, too, all matters of technic, have been splendidly dealt with.

About one-third of the book, the so-called general part, is taken up with the technic, which includes a description of instruments, of operating room and of sterilizing methods. This part also deals with the giving of anaesthetics, with a description of the various contrivances used nowadays in the giving of ether and chloroform. It also speaks of other general anaesthetics, such as bromide and chloride of ethyl, of somnoform and laughing-gas. The local anaesthetics are also well discussed. A considerable space is also devoted to the preparation and after treatment of abdominal cases.

A study of the so-called special part of the work will perhaps be of greatest service to the operator. Displacements of the uterus and the generally accepted operations for their relief are clearly explained, and each step is illustrated. The various other diseases requiring removal are taken up and the different methods of performing hysterectomy explained. Diseases of the appendages, which include the various inflammatory conditions, extrauterine pregnancy and tumors, receive a large amount of consideration. About seventy-five pages devoted to the consideration of the more extensive operations on the uterus and pelvis for carcinoma of the former, reflect clearly what is being done by the best operators today.

The rest of the book is taken up by many smaller matters, including many things hard to find elsewhere—as for instance—a consideration of the various fistulas about the genital tract.

The book will be of value to any operator devoting special effort to this field.

R. R. S.

A Text-Book of Diseases of Women. By Barton Cook Hirst. W. B. Saunders & Co., 1905. Second edition.

In this text-book the general practitioner will find an unusually practical treatise on the disease of women. Dr. Hirst is eminently qualified to write a work of this kind. A long experience as a teacher at the University of Pennsylvania has given him the power to judge a practitioner's needs and to meet them.

His arrangement of the subject is an anatomical rather than a pathologic one—a point which must appeal to one who wishes information on gynaecological cases as they must appeal to him. The book is intended to cover the whole subject of gynaecology without a discussion of debated points. After the usual introductory chapter on gynaecological examinations, he takes up the various methods employed in giving local treatments—the proper use of the douche, the tampon and electricity. The chapter on anomalies of development is unusually full and comprehensive for such a text-book. He then treats in order the diseases of the vulva, vagina, cervix, uterus, ovaries, tubes and pelvic peritonaeum. The chapter on menstruation and the anomalies of this and other functions is added for the sake of completeness and convenience to those who wish information on the significance of certain special symptoms. The diseases of the urinary tract are then dealt with and the cystoscope is explained and demonstrated by illustration. There is also a short chapter on floating kidney and it's treatment.

Dr. Hirst has reversed the usual order of things by putting his chapter on

technic and the use of anaesthetics at the end of the book instead of the beginning.

The most striking feature of the book is its illustrations—over 700 of them. They are most of them original and are as clear and as good as any we have seen.

To the practitioner who wants a few good text-books we know of no better one on this subject than this.

The National Standard Dispensatory. Containing the Natural History, Chemistry, Pharmacy, Actions and Uses of Medicines. In accordance with the United States Pharmacopoeia, eighth decennial revision of 1905 by authorization of the Convention. By Hobart Amory Hare, B. Sc., M. D., Professor of Therapeutics in the Jefferson Medical College, Philadelphia, Member of the Committee of Revision of the U. S. P.; Charles Caspari, Jr., Ph.G., Phar. D., Professor of Pharmacy in the Maryland College of Pharmacy, Baltimore, Member of the Committee of Revision of the U. S. P.; and Henry H. Rusby, M. D., Professor of Botany and Materia Medica in the College of Pharmacy of the City of New York, Member of the Committee of revision of the U. S. P. Imperial octavo, 1858 pages, 478 engravings. Cloth, $7.25, net; leather, $8.00, net. Thumb-Index, 50 cents extra. Lea Brothers & Co., Publishers, Philadelphia and New York.

To practitioners of medicine and pharmacy this new work of the highest authority is of great importance. It contains, by authorization of the Convention, every article in the new edition of the U. S. Pharmacopoeia, together with such explanatory notes and instructions as are necessary to a full understanding of the brief official statements. In addition it covers the essentials of the latest foreign Pharmacopoeias, and the very important domain of unofficial drugs and preparations so largely in use. Of its authors, Dr. Rusby has treated the department of Pharmacognosy, including the minor as well as the major drugs of the entire globe, a service never before rendered; Prof. Caspari deals with Pharmacy, giving full information regarding methods and products, with descriptions and explanations of the most approved apparatus and tests, and Dr. Hare has written the section on Medical Action and Uses giving a direct and compact presentation of modern therapeutics. An Appendix of 60 pages contains all necessary tables, formulas, tests, etc., for practical use. The General Index, of about 90 pages, contains full reference, to every page in the text, making it a repertory of the world's knowledge of drugs, and the Therapeutical Index, of about 40 pages, contains, under the name of each disease, references to all the medicines employed in its treatment, leading the reader to the points in the text where the conditions indicating their employment and choice will be found. In a word, the National Standard Dispensatory is a new, practical and authoritative work containing information on all substances used in medicine and pharmacy at the present day.

Dr. E. W. Houghton, of Detroit, has written the articles on Physiological Assaying, Vaccine, and the various Sera.

It is not overstating the facts to say that a volume of this character is an essential element of the armamentarium of the physician who desires to be scientific, accurate, up-to-date, and successful in his prescribing. Its general distribution and careful study by the profession would go a long way towards settling the question of proprietary medicines sold to the profession.

A Text-Book of Medical Practice for Practitioners and Students. Edited by William Bain, M. D., M. R. C. P. (London) with illustrations. 1011 pages, 6½x10.—Longmans, Green & Co., London, New York and Bombay, 1904.

This practice is written by a group of sixteen English physicians all but two of whom are from London. They include many of the most progressive medical men in England. The chapter on Nervous Diseases is written by Dr. J. S. Risien Russell, Physician to the Hospital for the Paralyzed and Epileptic, regarded by many as the most brilliant among the younger school of physicians in London. Percy Kidd, Physician to the Hospital for Consumption and Diseases of the Chest, furnishes the chapter on Respiratory Diseases, while Diseases of the Alimentary System are treated by Sidney Martin, Professor of Pathology in University College, and Physician to the University College Hospital. The other names are all familiar ones to medical students in London.

The book possesses one feature which is unique among text books on Practice, and that is chapters on anatomy and physiology of the various groups of organs whose diseases are treated. For example, the chapter on Diseases of the Circulatory System is preceded by fourteen pages dealing with the normal anatomy, physiology, and histology of the organs concerned. The anatomical contributions are by Arthur Robinson, Professor of Anatomy at King's College, and T. G. Brodie, Professor of Physiology at Brown Institute, furnishes the physiological discussion. The volume concludes with a chapter on The Inter-relation of Organs in Disease by J. Rose Bradford, Professor of Medicine in University College. Another innovation is a separate chapter on Tropical Diseases.

The distribution of space among the various diseases varies from the customary American plan, many subjects which are commonly treated exhaustively are summarized in a short chapter, while other diseases which are often only mentioned are here treated very satisfactorily. The plan of combining essential points in physiology with the description of disease certainly has much to recommend it. The publishers have successfully met the objection which would first occur to one's mind. By combining a thin and not heavy paper with a large type-page, they have produced a volume not only showing no increase in size over the usual volume on Practice, but actually lighter and easier to handle than the American texts.

A Manual of Operative Surgery, by J. F. Binnie, A. M., C. M. (Aberdeen). Second edition, revised and enlarged, with 567 illustrations, a number of which are printed in colors. P. Blakiston's Son & Co., Philadelphia.

The author states in his preface that he does not aim to cover the entire subject and specifies the intentional omission of amputations, ligations, surgery of bones and joints, and those parts of genito-urinary and rectal surgery which are described in the special text-books. The volume is divided into seven parts: 1. Head and Neck. 2. Thorax. 3. Abdomen. 4. Genito-urinary system. 5. Extremities. 6. Spine. 7. Unclassified, (under which are discussed acute abscess, drainage, nerves, plastic surgery, and suture material).

The book is excellent for its terse, clear, exposition, and readability; it is thoroughly up to date, describing the latest technique of abdominal, cranial, plastic, and genito-urinary operations. Among these are Mayo's operation for cure of umbilical hernia, Maury's triangular stitch for anastomoses, methods for preventing the vicious circle after gastro-enterostomy, Cuching's Gasserian ganglion operation, Brophy's cure for cleft palate, etc. There is a profusion of cuts which clarify an already clear text. With all its completeness, the volume is small and convenient, beautifully printed and bound, and altogether valuable to every doctor of medicine.

RECEIVED:

(Grateful acknowledgement of the receipt of the following is hereby made. Further notice in our review column may be given).

Yellow Fever Institute, U. S. Marine Hospital Service.

Bulletin Nos. 1, 2, 3, 4, 5, 6, 7—**Organization and Progress of the Institute.**

8—**Yellow Fever in France, Italy, Great Britain, and Austria.**

9—**Are Vessels Infected with Yellow Fever?** by Surg. H. R. Carter.

10—**The Methods of the Conveyance of Yellow Fever Infection,** by Surg. H. R. Carter.

11—**Vessels as Carriers of Mosquitoes,** by Passed Asst. Surg. S. B. Grubbs.

12—**The Early History of Quarantine:** Origin of Sanitary Measures Directed Against Yellow Fever, by Passed Asst. Surg. J. M. Eager.

13—**Report of Working Party No. 1.** A Study of the Etiology of Yellow Fever, by Surgeons Parker, Beyer and Pothier.

14—**Ditto—No. 2.** Experimental Studies in Yellow Fever and Malaria at Vera Cruz, Mexico, by Asst. Surgeons Rosenau, Parker, Francis and Beyer.

Bulletins of Hygienic Laboratory.

Preliminary Note on Viability of the Bacillus Pestis, by M. J. Rosenau—1900.

Formalin Disinfection of Baggage without Apparatus, by M. J. Rosenau.

4—**Viability of the Bacillus Pestis,** by M. J. Rosenau—1901.

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The Relative Frequency of a Protruding Lateral Sinus and its Bearing on the Choice of Method for the Total Opening of the Middle Ear Cavities.—Anomalies of the Temporal Bone. By Emil Amberg, M. D., Detroit. Reprints.

Methemoglobin as a Factor of Conservative Metabolism. By Bernard Orttinger, M. D., Denver. Reprint.

Practical Massage in Twenty Lessons. By Hartvig Nissen, Instructor and Lecturer in Massage and Gymnastics at Harvard University Summer School; Former Instructor of Physical Training at Johns Hopkins University and Wellesley College. With 46 Original Illustrations. 168 Pages. 12mo. Price, Extra Cloth, $1.00 net. F. A. Davis Company, Publishers, 1914-16 Cherry Street, Philadelphia.

The Era Key to the U. S. P.; A Complete List of the Drugs and Preparations of the United States Pharmacopoeia. Eighth decennial revision (1905). Vest-pocket size; 83 pages; price 25 cents. The Pharmaceutical Era. Publishers, 90 Williams Street, New York.

Two Interesting Cases. A Case of Bilateral Hyperplastic Hemorrhagic Retinitis Primarily Simulating Persistent Hyaloid Arteries. By Edward J. Bernstein, M. D., Kalamazoo. Reprints.

D. Appleton & Company expect to publish early in November a new book entitled, **Differential Diagnosis and Treatment of Diseases.** The author is Augustus Caille, Fellow of the New York Academy of Medicine; Member and ex-President of the American Pediatric Society; Professor of Diseases of Children, New York Post-Graduate Medical School and Hospital; Visiting Physician to the New York Post-Graduate and German Hospitals; Consulting Physician to Isabella Home and Hospital, etc.

Neurotic Disorders of Childhood. By B. K. Rochford, M. D., Professor Diseases of Children, University of Cincinnati, etc., Cincinnati. 440 pages. E. B. Treat & Co., New York. 1905.

Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. Part vii. **Diabetes Mellitus.** By Professor Dr. Carl von Noorden, Physician-in-chief to the City Hospital, Frankfort, a. M. 211 pp. E. B. Treat & Co., New York. 1905.

Therapeutics: Its Principles and Practice. By Horatio C. Wood, M. D., LL. D. Professor of Materia Medica and Therapeutics in the University of Pennsylvania; member of the National Academy of Science. Twelfth edition. 907 pp. J. B. Lippincott Co. 1905.

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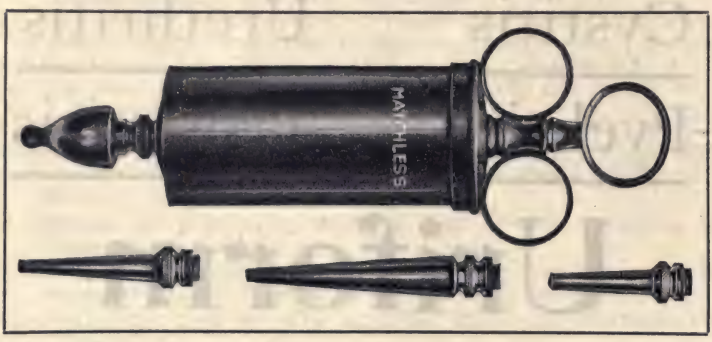

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The Liver in Pregnancy.

The Medical News of Sept. 17, 1904, in an editorial, says:

"One of the most interesting developments in that practically universal specialty, obstetrics, is the recognition of the fact that pregnancy seems to throw a special strain on the liver, which is not always well borne. As the result of recent investigations, the liver is to be made to share its burden of responsibility for serious health disturbances during pregnancy. It would not be strange if the carrying of certain intensely toxic substances to the kidneys, resulting from digestive disturbances, should produce functional derangement of their secretion."

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When the temperature keeps a point or two above normal for a few hours, the membrane of the oral cavity becomes dry and parched, causing great discomfort to the patient. Supplemented with this frequently comes the formation of sordes on the teeth and more or less inflammation along the marginal surface of the gums. The flow of saliva is checked and the sense of taste interfered with. In cases of this kind we may win the gratitude of the patient for all time urging the frequent use of an alkaline mouth wash of the nature of Glyco-Thymoline. This solution is admirably adapted both by physiological action and therapeutic effect to meet the requirements. The normal flow of saliva is re-established, the further formation of sordes is prevented and the mouth is kept sweet and clean. No one can estimate the amount of comfort derived by the patient under this simple treatment.

Notes on a Case of Perimetritis.

Hukam Chand, C.M.S., Surgeon Delhi Hospital, Delhi, India.

I was called to see a female patient in the city on October 12th, 1904. On arrival I found her with fever, temperature 102 degrees, tongue coated, pulse rapid, bowels costive, urine scanty and high colored, pain and tenderness over the hypogastric region as well as in both iliac fossae, vagina hot (as told by native dhai) but no discharge. On palpation the uterus was found hard and on inquiry it was found that the present complaint was due to abortion and exposure to cold. I diagnosed the case as perimetritis associated with ovaritis and prescribed:

( ) Calomel gr. ¼. One every three hours.
(2) Antikamnia & Heroin Tablets. One every four hours.
(3) Turpentine stupes over the seat of pain.
(4) Liquor Morphia, 15 minims at night, if no sleep.

Oct. 13th—Pain less than before. Had a good sleep for four hours. Continued the same treatment.

Oct. 14th.—Pain less than the previous day, had good sleep without morphia.

Oct. 15th.—Pain considerably less, patient could walk with the aid of stick. Good sleep. Continued same treatment but stopped turpentine stupes.

Oct. 16th.—Very slight pain remaining, patient weak, otherwise well. Stopped calomel, prescribed castor oil, oz. 1, and continued antikamnia and heroin tablets as before.

Oct. 17th.—No pain at all. Bowels moved twice. Prescribed tonic mixture. Patient getting well.

Remarks.—In my opinion the recovery of this case was due to the analgesic and antipyretic properties of antikamnia and heroin tablets. They are worth a trial in such conditions.—Practical Medicine, March, 1905, Delhi, India.

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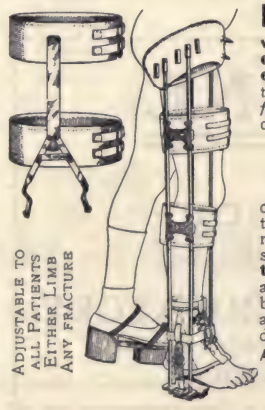

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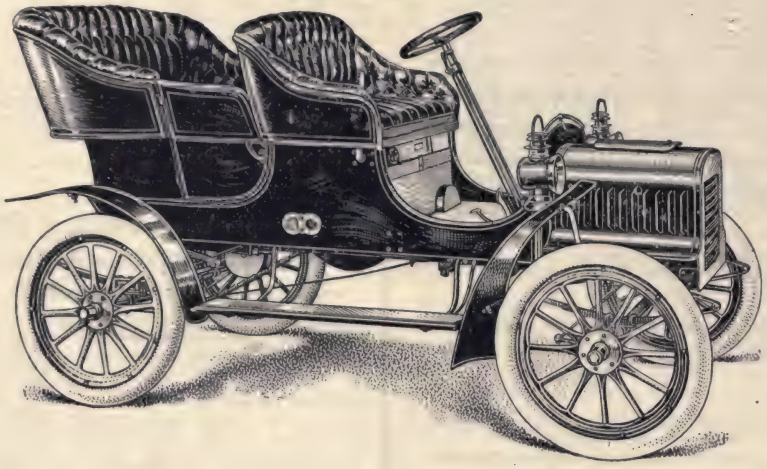

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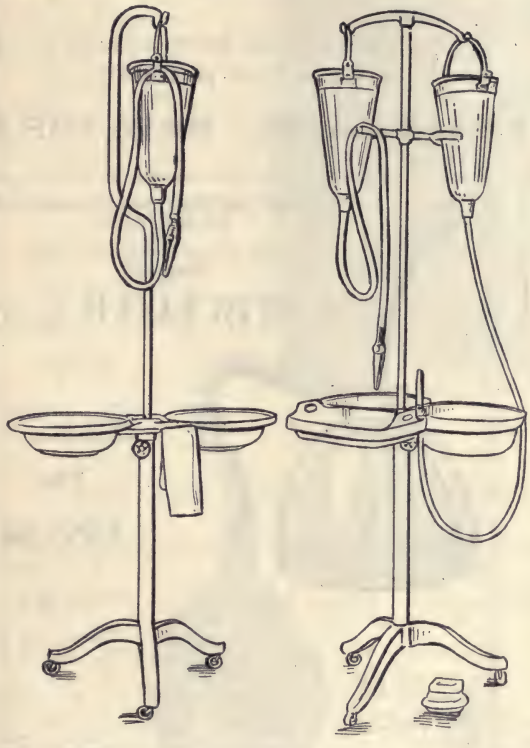

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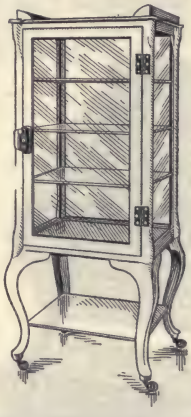

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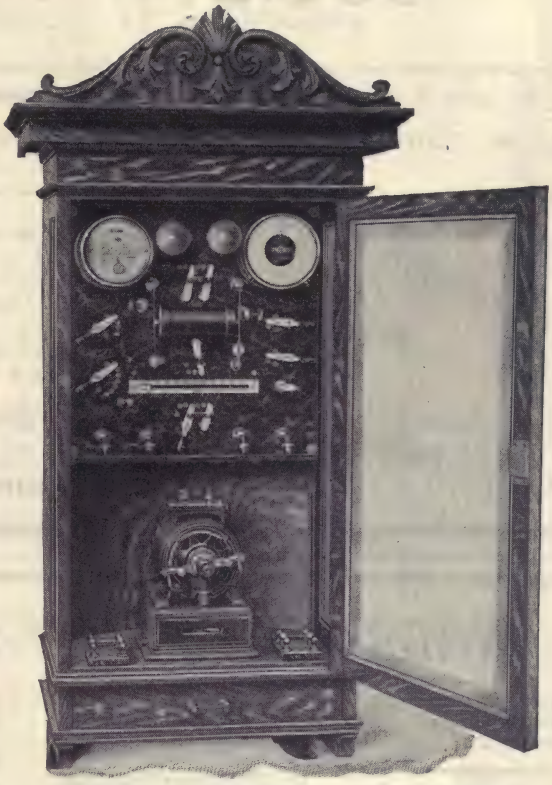

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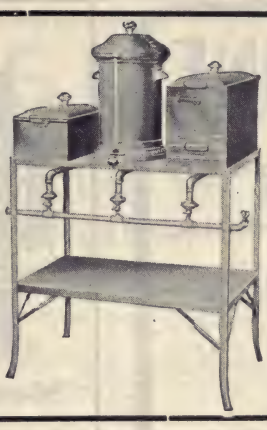

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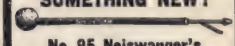

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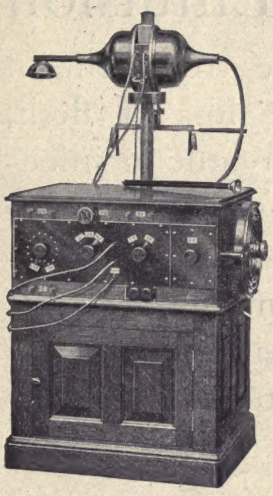

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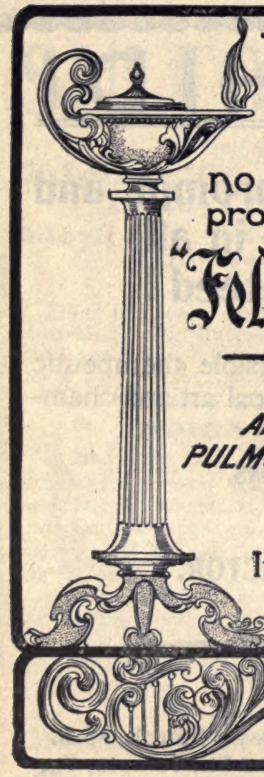

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